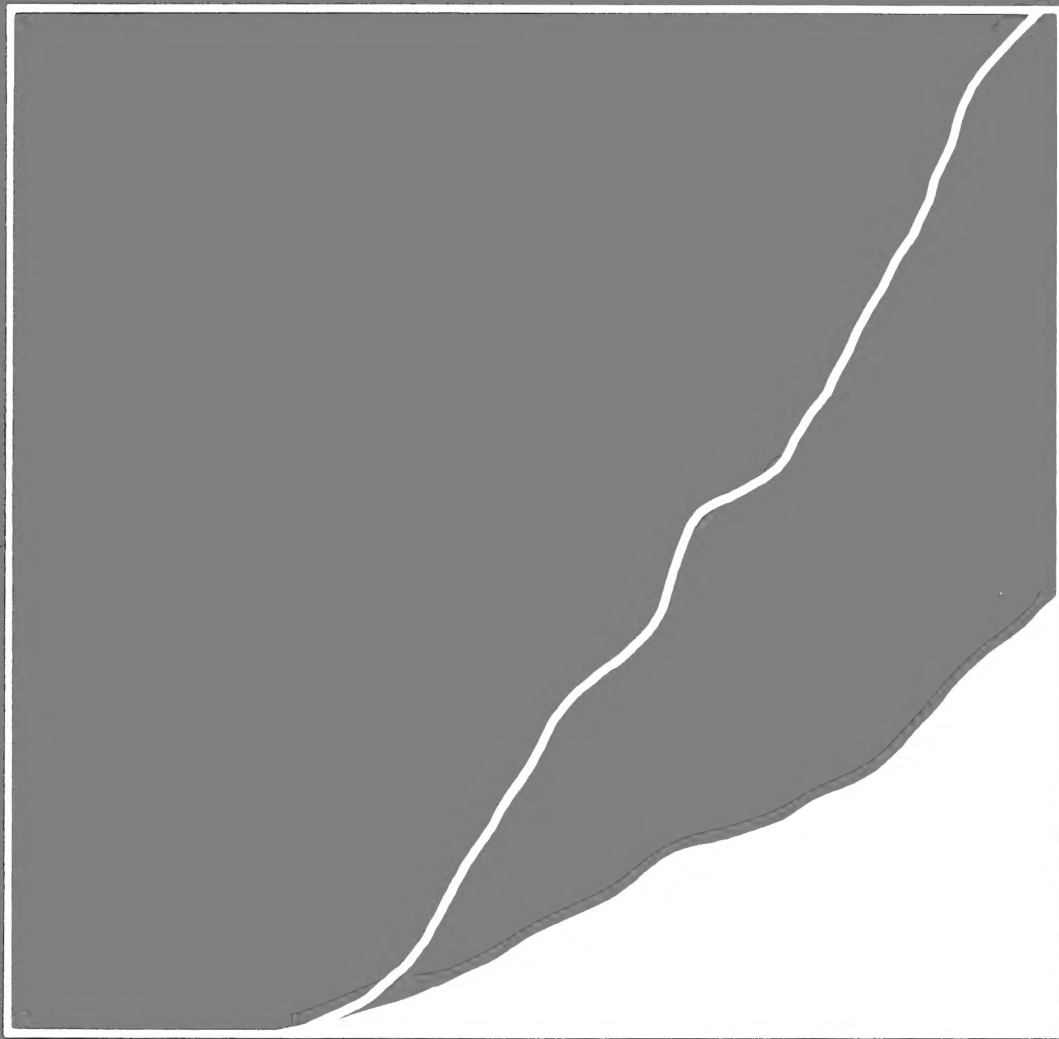


# Cancer Among Blacks

and other minorities:  
statistical profiles



U. S. DEPARTMENT OF  
HEALTH AND HUMAN SERVICES  
Public Health Service  
National Institutes of Health

**OFFICE OF MINORITY HEALTH  
RESOURCE CENTER  
P.O. BOX 37337  
WASHINGTON, D.C. 20013-7337**

About the cover:

The cover illustration depicts graphically the differential in age-specific mortality rates of U.S. blacks and whites for invasive cervical cancer. The upper curve illustrates the rates for black females and the lower curve illustrates the rates for white females.

# Cancer Among Blacks

and other minorities:  
statistical profiles

---

**NATIONAL CANCER INSTITUTE**  
**Division of Cancer Prevention and Control**

**Cancer Control Applications Branch**

**Claudia R. Baquet, M.D., M.P.H.,** Project Coordinator  
Program Director, Minority Field Programs

**Knut Ringen, Dr. P.H.**  
Program Director, Field Programs

**Biometry Branch**

**Earl S. Pollack, Sc.D.**  
Chief

**John L. Young, Dr. P.H.**  
Chief, Demographic Analysis Section

**John W. Horm, M.Sc.**  
Statistician, Demographic Analysis Section

**Lynn A. Gloeckler Ries, M.S.**  
Statistician, Demographic Analysis Section

Technassociates, Inc.  
**Nancy K. Simpson, M.Sc.**



---

**National Cancer Institute**

---

U.S. DEPARTMENT OF  
HEALTH AND HUMAN SERVICES  
Public Health Service  
National Institutes of Health



# TABLE OF CONTENTS

OVERVIEW AND SUMMARY		Page
Table of Contents		3
Discussion		5
Summary Table 1.	Average Annual Age-adjusted Cancer Incidence Rates per 100,000 by Primary Site and Racial/Ethnic Group, SEER Program, 1978-81 .	9
Summary Table 2.	Average Annual Age-adjusted Cancer Mortality Rates per 100,000 by Primary Site and Racial/Ethnic Group, Total United States, 1978-81 . . . . .	10
Summary Table 3.	Five-year Relative Survival Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1973-81 . . . . .	11
Summary Table 4.	Ratio of Black to White Age-adjusted (1970 U.S. Standard) Cancer Incidence and Mortality Rates by Primary Site, SEER Program, 1978-81 . . . . .	12
Summary Table 5.	Five-year Relative Survival for Selected Cancer Sites: Black and White Differences, SEER Program, 1973-81 . . . . .	13
NOTE TO READERS		17
SECTION I. DATA SOURCES		
Table of Contents		21
Discussion		23
Figure I-1.	Surveillance, Epidemiology and End Results Program, National Cancer Institute . . . . .	26
Table I-1.	Percent Distribution of Cancer Cases by Geographic Area for Eight Racial/Ethnic Groups, SEER Program, 1978-81 . . . . .	27
SECTION II. CANCER INCIDENCE FOR BLACKS, WHITES, AND OTHER GROUPS		
Table of Contents		31
Discussion		33
Table II-1.	Average Annual Age-adjusted Cancer Incidence Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1978-81 .	35
<i>Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81</i>		
Figure II-1.	All Sites Combined . . . . .	37
Figure II-2.	All Sites Combined, Male . . . . .	38

Figure II-3.	All Sites Combined, Female . . . . .	39
Figure II-4.	Bladder, Male . . . . .	40
Figure II-5.	Bladder, Female . . . . .	41
Figure II-6.	Breast, Female . . . . .	42
Figure II-7.	Cervix Uteri . . . . .	43
Figure II-8.	Colon, Male . . . . .	44
Figure II-9.	Colon, Female . . . . .	45
Figure II-10.	Colon and Rectum, Male . . . . .	46
Figure II-11.	Colon and Rectum, Female . . . . .	47
Figure II-12.	Corpus Uteri . . . . .	49
Figure II-13.	Esophagus, Male . . . . .	50
Figure II-14.	Esophagus, Female . . . . .	51
Figure II-15.	Larynx, Male . . . . .	52
Figure II-16.	Larynx, Female . . . . .	53
Figure II-17.	Lung, Male . . . . .	54
Figure II-18.	Lung, Female . . . . .	55
Figure II-19.	Multiple Myeloma, Male . . . . .	56
Figure II-20.	Multiple Myeloma, Female . . . . .	57
Figure II-21.	Ovary . . . . .	59
Figure II-22.	Pancreas, Male . . . . .	60
Figure II-23.	Pancreas, Female . . . . .	61
Figure II-24.	Prostate . . . . .	63
Figure II-25.	Rectum, Male . . . . .	64
Figure II-26.	Rectum, Female . . . . .	65
Figure II-27.	Stomach, Male . . . . .	66
Figure II-28.	Stomach, Female . . . . .	67

*Age-adjusted Cancer Incidence Rates per 100,000 by Racial/Ethnic Group: 1978-81*

Figure II-29.	All Sites Combined . . . . .	68
Figure II-30.	Bladder . . . . .	69
Figure II-31.	Breast, Female . . . . .	70
Figure II-32.	Cervix Uteri . . . . .	71
Figure II-33.	Colon . . . . .	72
Figure II-34.	Colon and Rectum . . . . .	73
Figure II-35.	Corpus Uteri . . . . .	74
Figure II-36.	Esophagus . . . . .	75
Figure II-37.	Larynx . . . . .	76
Figure II-38.	Lung . . . . .	77
Figure II-39.	Multiple Myeloma . . . . .	78
Figure II-40.	Ovary . . . . .	79
Figure II-41.	Pancreas . . . . .	80
Figure II-42.	Prostate . . . . .	81
Figure II-43.	Rectum . . . . .	82
Figure II-44.	Stomach . . . . .	83

### SECTION III. CANCER MORTALITY FOR BLACKS, WHITES, AND OTHER GROUPS

<b>Table of Contents</b> . . . . .	87
<b>Discussion</b> . . . . .	89
Table III-1.                      Average Annual Age-adjusted Cancer Mortality Rates per 100,000 by Primary Site and Racial/Ethnic Group, Total United States, 1978-81	90
<i>Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81</i>	
Figure III-1.                      All Sites Combined . . . . .	91
Figure III-2.                      All Sites Combined, Male . . . . .	92
Figure III-3.                      All Sites Combined, Female . . . . .	93
Figure III-4.                      Bladder, Male . . . . .	94
Figure III-5.                      Bladder, Female . . . . .	95
Figure III-6.                      Breast, Female . . . . .	96
Figure III-7.                      Cervix Uteri . . . . .	97
Figure III-8.                      Colon, Male . . . . .	98
Figure III-9.                      Colon, Female . . . . .	99
Figure III-10.                      Colon and Rectum, Male . . . . .	100
Figure III-11.                      Colon and Rectum, Female . . . . .	101
Figure III-12.                      Corpus Uteri . . . . .	103
Figure III-13.                      Esophagus, Male . . . . .	104
Figure III-14.                      Esophagus, Female . . . . .	105
Figure III-15.                      Larynx, Male . . . . .	106
Figure III-16.                      Larynx, Female . . . . .	107
Figure III-17.                      Lung, Male . . . . .	108
Figure III-18.                      Lung, Female . . . . .	109
Figure III-19.                      Multiple Myeloma, Male . . . . .	110
Figure III-20.                      Multiple Myeloma, Female . . . . .	111
Figure III-21.                      Ovary . . . . .	113
Figure III-22.                      Pancreas, Male . . . . .	114
Figure III-23.                      Pancreas, Female . . . . .	115
Figure III-24.                      Prostate . . . . .	117
Figure III-25.                      Rectum, Male . . . . .	118
Figure III-26.                      Rectum, Female . . . . .	119
Figure III-27.                      Stomach, Male . . . . .	120
Figure III-28.                      Stomach, Female . . . . .	121

### SECTION IV. FIVE-YEAR RELATIVE SURVIVAL FOR BLACKS, WHITES, AND OTHER GROUPS

<b>Table of Contents</b> . . . . .	125
<b>Discussion</b> . . . . .	127
Table IV-1.                      Five-year Relative Survival Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1973-81 . . . . .	129

*Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81*

Figure IV-1.	All Sites Combined . . . . .	130
Figure IV-2.	Bladder . . . . .	131
Figure IV-3.	Breast, Female . . . . .	132
Figure IV-4.	Cervix Uteri . . . . .	133
Figure IV-5.	Colon . . . . .	134
Figure IV-6.	Colon and Rectum . . . . .	135
Figure IV-7.	Corpus Uteri . . . . .	136
Figure IV-8.	Esophagus . . . . .	137
Figure IV-9.	Larynx . . . . .	138
Figure IV-10.	Lung and Bronchus . . . . .	139
Figure IV-11.	Lung and Bronchus, Male . . . . .	140
Figure IV-12.	Lung and Bronchus, Female . . . . .	141
Figure IV-13.	Multiple Myeloma . . . . .	142
Figure IV-14.	Ovary . . . . .	143
Figure IV-15.	Pancreas . . . . .	144
Figure IV-16.	Prostate . . . . .	145
Figure IV-17.	Rectum . . . . .	146
Figure IV-18.	Stomach . . . . .	147

**SECTION V. SURVIVAL TRENDS: RELATIVE SURVIVAL BY SUCCESSIVE NUMBER OF YEARS AFTER DIAGNOSIS AND YEAR OF DIAGNOSIS, 1973-75 AND 1976-81, FOR BLACKS AND WHITES**

<b>Table of Contents . . . . .</b>	<b>151</b>
<b>Discussion . . . . .</b>	<b>153</b>

*Relative Survival Rates by Successive Number of Years After Diagnosis and Year of Diagnosis, SEER Program: 1973-81*

Figure V-1.	All Sites Combined, Black . . . . .	154
Figure V-2.	All Sites Combined, White . . . . .	155
Figure V-3.	Bladder, Black . . . . .	156
Figure V-4.	Bladder, White . . . . .	157
Figure V-5.	Breast, Black Female . . . . .	158
Figure V-6.	Breast, White Female . . . . .	159
Figure V-7.	Cervix Uteri, Black . . . . .	160
Figure V-8.	Cervix Uteri, White . . . . .	161
Figure V-9.	Colon, Black . . . . .	162
Figure V-10.	Colon, White . . . . .	163
Figure V-11.	Colon and Rectum, Black . . . . .	164
Figure V-12.	Colon and Rectum, White . . . . .	165
Figure V-13.	Corpus Uteri, Black . . . . .	166
Figure V-14.	Corpus Uteri, White . . . . .	167
Figure V-15.	Esophagus, Black . . . . .	168



Figure V-16.	Esophagus, White . . . . .	169
Figure V-17.	Larynx, Black . . . . .	170
Figure V-18.	Larynx, White . . . . .	171
Figure V-19.	Lung and Bronchus, Black Male . . . . .	172
Figure V-20.	Lung and Bronchus, White Male . . . . .	173
Figure V-21.	Lung and Bronchus, Black Female . . . . .	174
Figure V-22.	Lung and Bronchus, White Female . . . . .	175
Figure V-23.	Multiple Myeloma, Black . . . . .	176
Figure V-24.	Multiple Myeloma, White . . . . .	177
Figure V-25.	Ovary, Black . . . . .	178
Figure V-26.	Ovary, White . . . . .	179
Figure V-27.	Pancreas, Black . . . . .	180
Figure V-28.	Pancreas, White . . . . .	181
Figure V-29.	Prostate, Black . . . . .	182
Figure V-30.	Prostate, White . . . . .	183
Figure V-31.	Rectum, Black . . . . .	184
Figure V-32.	Rectum, White . . . . .	185
Figure V-33.	Stomach, Black . . . . .	186
Figure V-34.	Stomach, White . . . . .	187

## SECTION VI. FIVE-YEAR RELATIVE SURVIVAL BY STAGE OF CANCER AT DIAGNOSIS FOR BLACKS AND WHITES

Table of Contents . . . . .	191
Discussion . . . . .	193

### *Five-year Relative Survival Rates by Cancer Stage at Diagnosis: 1977-81*

Figure VI-1.	Bladder . . . . .	195
Figure VI-2.	Breast, Female . . . . .	196
Figure VI-3.	Corpus Uteri . . . . .	197
Figure VI-4.	Colon . . . . .	198
Figure VI-5.	Colon and Rectum . . . . .	199
Figure VI-6.	Cervix Uteri . . . . .	200
Figure VI-7.	Esophagus (white only) . . . . .	201
Figure VI-8.	Lung . . . . .	202
Figure VI-9.	Melanoma (white only) . . . . .	203
Figure VI-10.	Ovary . . . . .	204
Figure VI-11.	Prostate . . . . .	205
Figure VI-12.	Rectum . . . . .	206
Figure VI-13.	Stomach . . . . .	207

## SECTION VII. DISTRIBUTION OF HISTOLOGIC TYPES OF CANCER FOR BLACKS AND WHITES

<b>Table of Contents</b> . . . . .	211
<b>Discussion</b> . . . . .	213
<i>Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites, SEER Program, 1978-81</i>	
Table VII-1. All Sites Combined . . . . .	215
Table VII-2. Bladder . . . . .	216
Table VII-3. Breast, Female . . . . .	217
Table VII-4. Breast, Female <40 years of age . . . . .	218
Table VII-5. Breast, Female 40+ years of age . . . . .	219
Table VII-6. Cervix Uteri . . . . .	220
Table VII-7. Colon . . . . .	221
Table VII-8. Colon and Rectum . . . . .	222
Table VII-9. Corpus Uteri . . . . .	223
Table VII-10. Esophagus . . . . .	224
Table VII-11. Larynx . . . . .	225
Table VII-12. Lung, Male . . . . .	226
Table VII-13. Lung, Female . . . . .	227
Table VII-14. Ovary . . . . .	228
Table VII-15. Pancreas . . . . .	229
Table VII-16. Prostate . . . . .	230
Table VII-17. Rectum . . . . .	231
Table VII-18. Stomach . . . . .	232

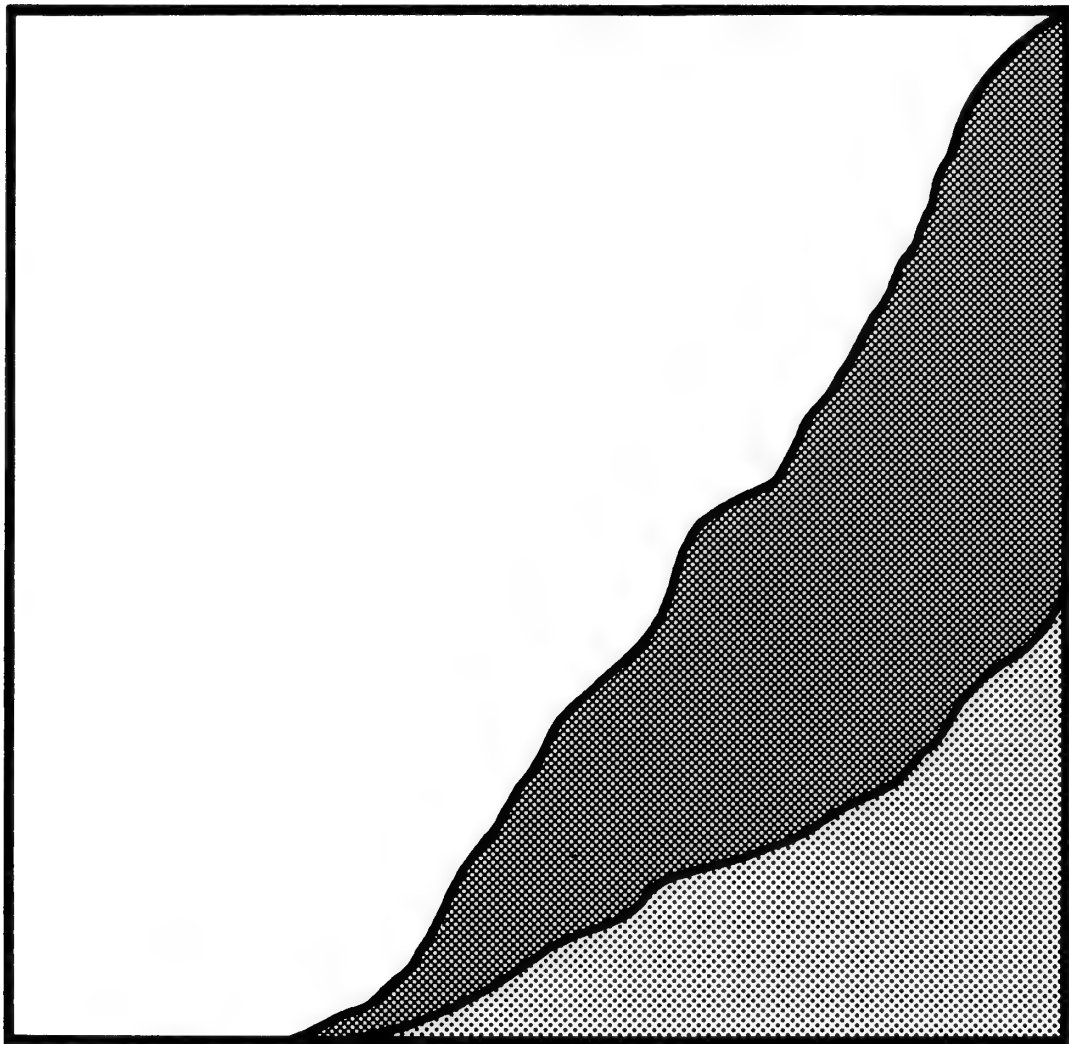
## SECTION VIII. CANCER TRENDS: COMPARISON OF INCIDENCE, MORTALITY, AND SURVIVAL FOR BLACKS AND WHITES

<b>Table of Contents</b> . . . . .	235
<b>Discussion</b> . . . . .	237
<i>Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81</i>	
Figure VIII-1. All Sites Combined, Black . . . . .	240
Figure VIII-2. All Sites Combined, White . . . . .	241
Figure VIII-3. Bladder, Black . . . . .	242
Figure VIII-4. Bladder, White . . . . .	243
Figure VIII-5. Breast, Female, Black . . . . .	244
Figure VIII-6. Breast, Female, White . . . . .	245
Figure VIII-7. Cervix Uteri, Black . . . . .	246
Figure VIII-8. Cervix Uteri, White . . . . .	247
Figure VIII-9. Colon, Black . . . . .	248
Figure VIII-10. Colon, White . . . . .	249
Figure VIII-11. Colon and Rectum, Black . . . . .	250

Figure VIII-12.	Colon and Rectum, White . . . . .	251
Figure VIII-13.	Corpus Uteri, Black . . . . .	252
Figure VIII-14.	Corpus Uteri, White . . . . .	253
Figure VIII-15.	Esophagus, Black . . . . .	254
Figure VIII-16.	Esophagus, White . . . . .	255
Figure VIII-17.	Larynx, Black . . . . .	256
Figure VIII-18.	Larynx, White . . . . .	257
Figure VIII-19.	Lung and Bronchus, Black Male . . . . .	258
Figure VIII-20.	Lung and Bronchus, White Male . . . . .	259
Figure VIII-21.	Lung and Bronchus, Black Female . . . . .	260
Figure VIII-22.	Lung and Bronchus, White Female . . . . .	261
Figure VIII-23.	Multiple Myeloma, Black . . . . .	262
Figure VIII-24.	Multiple Myeloma, White . . . . .	263
Figure VIII-25.	Ovary, Black . . . . .	264
Figure VIII-26.	Ovary, White . . . . .	265
Figure VIII-27.	Pancreas, Black . . . . .	266
Figure VIII-28.	Pancreas, White . . . . .	267
Figure VIII-29.	Prostate, Black . . . . .	268
Figure VIII-30.	Prostate, White . . . . .	269
Figure VIII-31.	Rectum, Black . . . . .	270
Figure VIII-32.	Rectum, White . . . . .	271
Figure VIII-33.	Stomach, Black . . . . .	272
Figure VIII-34.	Stomach, White . . . . .	273



# Overview And Summary





# TABLE OF CONTENTS

## OVERVIEW AND SUMMARY

	Page
<b>Discussion</b> .....	5
Summary Table 1.      Average Annual Age-adjusted Cancer Incidence Rates per 100,000 by Primary Site and Racial/Ethnic Group, SEER Program, 1978-81 .	9
Summary Table 2.      Average Annual Age-adjusted Cancer Mortality Rates per 100,000 by Primary Site and Racial/Ethnic Group, Total United States, 1978-81 .....	10
Summary Table 3.      Five-year Relative Survival Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1973-81 .....	11
Summary Table 4.      Ratio of Black to White Age-adjusted (1970 U.S. Standard) Cancer Incidence and Mortality Rates by Primary Site, SEER Program, 1978-81 .....	12
Summary Table 5.      Five-year Relative Survival for Selected Cancer Sites: Black and White Differences, SEER Program, 1973-81 .....	13





# Overview and Summary

In 1984, in order to achieve greater direction to the cancer control effort, the National Cancer Institute announced the national goal of reducing cancer mortality by one-half by the end of the century. As part of the planning, available data on the cancer experiences of different racial/ethnic groups were reviewed. These data document that certain segments of the population have disproportionately severe cancer rates compared to the general population. These data are presented in this report. The statistics presented are descriptive and intended to document discrepancies in cancer experiences of different population groups. This report does not attempt to identify the causes of such discrepancies.

Fundamentally, the national goal for cancer control is based on the understanding that cancers can be prevented and survival among cancer patients improved through individual and institutional change. To achieve such changes, the cooperation of all health professionals and concerned organizations and institutions will be required. This report intends that such individuals and organizations make use of these statistics to identify areas of opportunity where they can have the greatest impact: the researchers to formulate hypotheses for in-depth studies of causes of discrepancies in cancer rates and interventions to reduce the causes; the health planners to propose new program options for improved health protection; the policy-makers to decide about resource allocations.

The data presented in this report fall into three categories:

- *Incidence data:* Cancer incidence data measure the number of new cases of cancer during the year. These data are collected by the Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute for eleven population-based areas in the United States covering 12 percent of the U.S. population, including eight ethnic/racial groups.
- *Mortality data:* Cancer mortality data are collected by the National Center for Health Statistics as part of the national vital statistics system. These data include all deaths occurring in the United States during a year. U.S. mortality data classify Hispanics as whites.
- *Survival data:* Survival data indicate how long patients continue to live following diagnosis of a cancer. These data also are collected by the SEER program for the eleven population registries covered.

The data collected cover both cross-sectional comparisons of cancer rates and time-trends for the eight racial/ethnic groups covered by the SEER program. For much of the in-depth analysis, particularly related to survival patterns, data were available for blacks and whites only. The reason for this is that the number of cases for specific cancer sites for other racial/ethnic groups were too small to

allow for meaningful statistical analysis. The racial/ethnic breakdown for the SEER program areas is discussed in Section I of the report. Based on these data, the following major findings have emerged:

- *Cancer incidence:* Among the major racial/ethnic groups, blacks have the highest incidence rate for all cancers combined, followed by Native Hawaiians and then whites. Native Americans had the lowest incidence. (See Section II of report.)
- *Cancer mortality:* Blacks also experience the highest overall cancer mortality rates, followed by Native Hawaiians and whites. (Section III)
- *Cancer survival:* Japanese-Americans have the highest overall survival rates, with whites having the second highest rates. Blacks and Native Americans experience the least favorable rates. (Sections IV-VI)

The detailed analysis of survival patterns between blacks and whites revealed:

- While whites showed increased survival during the last decade for each year following diagnosis, blacks experienced a largely unchanged survival pattern. (Section V)
- Differences in survival between blacks and whites were independent of stage at time of diagnosis; the differences persisted in early stages at approximately the same level as for advanced stages. (Section VI)
- Histologic differences in tumor types may account for some of the differences in survival experience. For some cancer sites, blacks appear to have tumor types that are more aggressive and result in poorer survival than some tumor types experienced by whites. (Section VII)

Finally, when comparing trends in incidence, mortality and survival over time for blacks and whites, the following points can be made (Section VIII):

- Both blacks and whites experienced increased overall cancer incidence rates.
- Because whites experienced higher cancer survival rates than blacks, the effect of increases in incidence rates on mortality rates was less for whites than for blacks.
- This analysis only covered the period since 1973, and the differential effects described probably would be greater had data over a longer time period been available.

Summary Tables 1-5 at the end of this section provide an overview of major cancer incidence, mortality, and survival patterns. In comparing blacks and whites, blacks experience disproportionate cancer rates by cancer sites as follows:

- *Cancer incidence:* Breast (women under age 40), esophagus, lung (males), multiple myeloma, pancreas, prostate, stomach.
- *Cancer mortality:* Cervix, esophagus, larynx, lung, multiple myeloma, pancreas, prostate.
- *Cancer survival:* Bladder, breast, corpus uteri, prostate, rectum.



Summary Table 1

# Average Annual Age-adjusted Cancer Incidence Rates per 100,000 by Primary Site and Racial/Ethnic Group, SEER Program, 1978-81

Primary Site	Whites	Blacks	Hispanics*	Japanese	Chinese	Filipinos	Native Hawaiians	Native Americans
All sites	335.0	372.5	246.2	247.8	252.9	222.4	357.9	164.2
Bladder	15.4	8.6	8.2	7.7	7.7	5.1	8.2	1.1
Breast, Female	86.5	4 71.9	3 54.1	53.1	54.0	43.4	111.1	28.5
Ages <40	8.2	10.7	7.9	8.6	7.4	7.1	7.1	4.0
Ages 40+	221.1	1 179.3	1 134.9	146.5	141.0	117.0	300.0	71.4
Cervix Uteri	8.8	20.2	17.7	7.6	11.2	8.8	14.1	22.6
Colon & Rectum	49.6	5 48.9	5 25.2	50.4	40.8	30.1	32.7	9.9
Colon	34.6	37.9	15.8	34.0	27.7	17.7	18.4	8.0
Rectum	15.0	11.7	9.4	16.4	13.1	12.4	14.3	1.9
Corpus Uteri	25.1	13.4	11.1	18.6	17.6	11.7	27.1	2.6
Esophagus	3.0	11.5	1.6	2.4	3.4	3.6	6.4	2.4
Larynx	4.6	6.6	2.6	2.6	1.9	1.8	5.2	0.9
Lung, Male	81.0	3 119.0	4 84.3	45.1	62.6	38.1	100.9	14.6
Lung, Female	28.2	30.5	13.0	14.1	31.2	18.4	38.6	3.1
Multiple Myeloma	3.4	7.9	2.5	1.2	1.6	4.1	5.5	2.8
Ovary	13.6	9.5	10.4	8.7	9.1	9.4	13.5	3.2
Pancreas	8.9	13.6	10.8	7.4	9.3	6.7	10.0	6.0
Prostate	75.1	2 120.3	2 76.5	44.2	26.1	48.9	57.9	45.4
Stomach	8.0	13.8	15.7	27.9	9.0	7.0	32.4	19.3

\* Cancer incidence data for Hispanics come from New Mexico only.

Summary Table 2

# Average Annual Age-adjusted Cancer Mortality Rates per 100,000 by Primary Site and Racial/Ethnic Group, Total United States, 1978-81

Primary Site	Whites*	Blacks	Japanese	Chinese	Filipinos	Native Hawaiians	Native Americans
All sites	163.6	208.5	104.2	131.5	69.7	200.5	87.4
Bladder	3.9	3.8	1.8	1.7	1.5	1.6	1.0
Breast, Female	26.6	26.3	9.9	13.0	8.0	33.0	8.2
Ages <40	1.6	2.5	1.1	0.8	0.9	1.2	1.1
Ages 40+	70.2	68.1	25.2	34.6	20.6	88.7	20.6
Cervix Uteri	3.2	8.8	2.7	2.9	1.6	4.2	5.8
Colon & Rectum	21.6	22.3	17.2	19.3	8.1	15.0	8.6
Colon	18.1	18.8	13.6	15.5	5.8	11.4	6.8
Rectum	3.5	3.5	3.6	3.8	2.3	3.6	1.8
Corpus Uteri	3.9	6.6	3.9	4.3	2.0	3.0	1.8
Esophagus	2.6	9.2	1.9	3.3	1.9	6.5	2.1
Larynx	1.3	2.5	0.2	0.7	0.4	1.4	0.9
Lung, Male	69.3	91.4	32.7	48.2	20.0	88.0	28.0
Lung, Female	20.2	20.1	8.6	21.2	6.8	31.5	8.6
Multiple Myeloma	2.4	5.0	1.2	1.2	1.2	2.8	1.9
Ovary	8.1	6.4	4.3	4.2	2.8	7.0	3.3
Pancreas	8.4	11.0	7.0	7.4	3.3	10.9	4.5
Prostate	21.0	43.9	8.8	7.5	8.2	11.6	15.5
Stomach	5.3	10.0	17.5	7.8	3.3	25.3	6.2

\* The National Center for Health Statistics from which these data are derived  
does not code ethnicity for Hispanics.

Summary Table 3

# **Five-year Relative Survival Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1973-81 (percent)**

Primary Site	Anglos <sup>3</sup>	Blacks	Hispanics	Japanese	Chinese	Filipinos	Native Hawaiians	Native Americans
All sites	50	38	47	51	44	45	44	34
Bladder	74	50	70	72	74 <sup>1</sup>	49 <sup>1</sup>	48 <sup>2</sup>	37 <sup>2</sup>
Breast, Female	75	63	72	85	78	72	76	53 <sup>1</sup>
Cervix Uteri	68	63	69	72	72 <sup>1</sup>	72 <sup>1</sup>	73	67 <sup>1</sup>
Colon & Rectum	51	44	46	59	50	41	51 <sup>1</sup>	37 <sup>1</sup>
Colon	52	46	48	61	53	38	59 <sup>1</sup>	44 <sup>1</sup>
Rectum	49	37	44	55	44	45	42 <sup>1</sup>	24 <sup>1</sup>
Corpus Uteri	88	57	86	86	87	78 <sup>1</sup>	80 <sup>1</sup>	66 <sup>2</sup>
Esophagus	5	3	—	—	11 <sup>1</sup>	—	—	—
Larynx	67	59	60 <sup>1</sup>	75 <sup>1</sup>	67 <sup>2</sup>	57 <sup>2</sup>	79 <sup>2</sup>	—
Lung & Bronchus	12	11	11	14	15	12	16	5
Male	11	10	9	13	15	12	13	2
Female	16	14	15	17	15	11	24	—
Multiple Myeloma	24	27	21	30 <sup>1</sup>	24 <sup>1</sup>	29 <sup>1</sup>	26 <sup>1</sup>	—
Ovary	37	39	41	41	42 <sup>1</sup>	52 <sup>1</sup>	36 <sup>1</sup>	43 <sup>1</sup>
Pancreas	3	3	2	3	3	2	—	—
Prostate	69	59	71	76	76 <sup>1</sup>	73	85 <sup>1</sup>	47 <sup>1</sup>
Stomach	14	15	16	28	16	16	14	9

<sup>1</sup> Standard error between 5 & 10%.

<sup>2</sup> Standard error 10%.

<sup>3</sup> Caucasians not of Hispanic origin or surname.

Summary Table 4

# Ratio of Black to White Age-adjusted (1970 U.S. Standard) Cancer Incidence and Mortality Rates by Primary Site, SEER Program, 1978-81

Primary Site	Incidence Rates	Mortality Rates
All Sites Combined	1.11	1.27
Bladder	0.56	0.97
Breast, Female	0.84	0.99
Cervix Uteri	2.30	2.75
Colon & Rectum	1.00	1.03
Colon	1.10	1.04
Rectum	0.78	1.00
Corpus Uteri	0.53	1.69
Esophagus	3.89	3.47
Larynx	1.43	1.92
Lung, Male	1.47	1.32
Female	1.08	1.00
Multiple Myeloma	2.30	2.08
Ovary	0.70	0.79
Pancreas	1.43	1.31
Prostate	1.60	2.09
Stomach	1.72	1.89



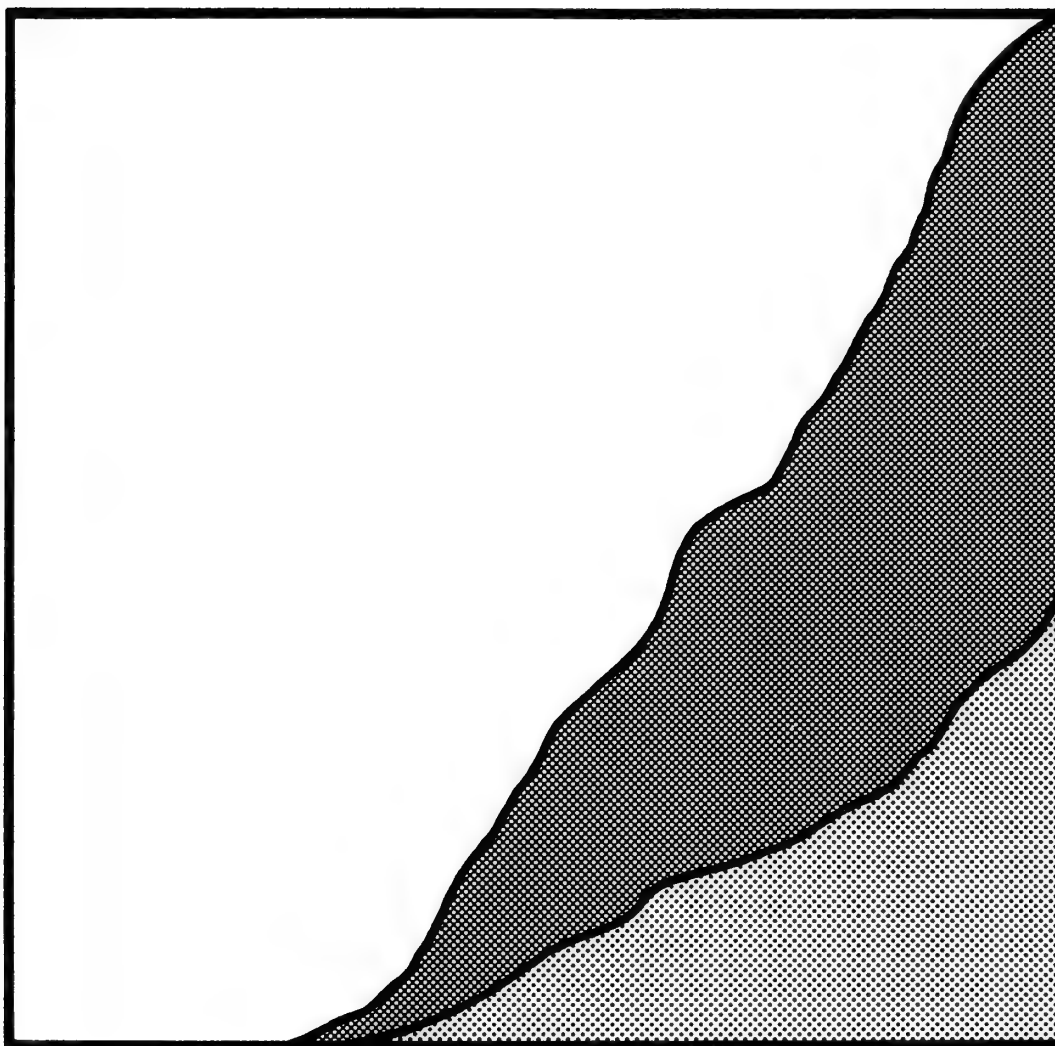
Summary Table 5

**Five-Year Relative Survival for Selected Cancer Sites:  
Black and White Differences  
SEER Program, 1973-81  
(percent)**

Primary Site	5-Year Relative Survival		Difference
	Blacks	Whites	
All Sites Combined	38	50	12
Corpus Uteri	57	88	31
Bladder	50	74	24
Breast-Female	63	75	12
Rectum	37	49	12
Prostate	59	69	10



# Note To Readers





# Note to Readers

## Organization of Cancer Sites

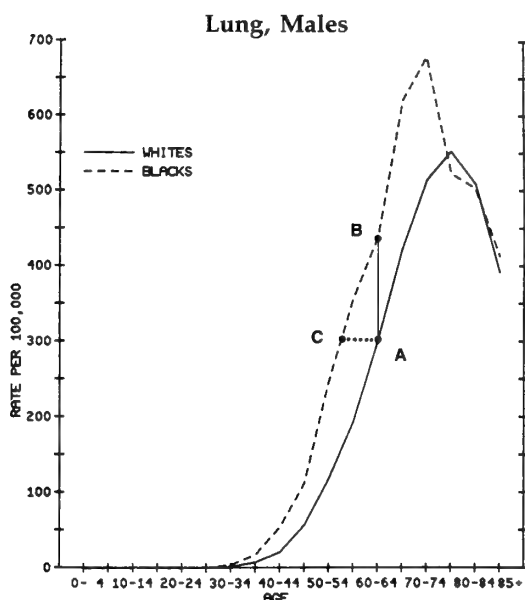
This document does not follow the International Classification of Diseases system normally used for organizing cancer sites for the following reasons:

- The report is primarily intended to inform a broad range of health professionals and policy makers. In order to simplify locating information in the report, cancer sites are listed alphabetically rather than by organ system.
- The document covers only the major cancer sites of concern to the topic and it was thought that an alphabetical listing would be more appropriate.

## Age-specific Cancer Rates

Because age is such an important variable to consider when looking at cancer, age-specific information is presented in a series of cancer incidence and mortality graphs in Sections II and III. When using these graphs it is important to compare the cancer rates of blacks and whites *within* the same age-groups. For example, in the figure below age-specific incidence rates are shown for lung cancer among males. Point A on this graph represents the incidence rate of lung cancer for white males between the ages of 60 and 64. This point should be compared to point B, the point vertically above point A which represents the incidence rate of lung cancer for black males in the same 60 to 64 year age group. Point A should not be compared to point C, a point horizontally across from point A, because point C represents the cancer incidence rate of black men aged 50 to 54, not 60 to 64.

Age-Specific Cancer Incidence Rates Per 100,000  
SEER Program, 1978-81



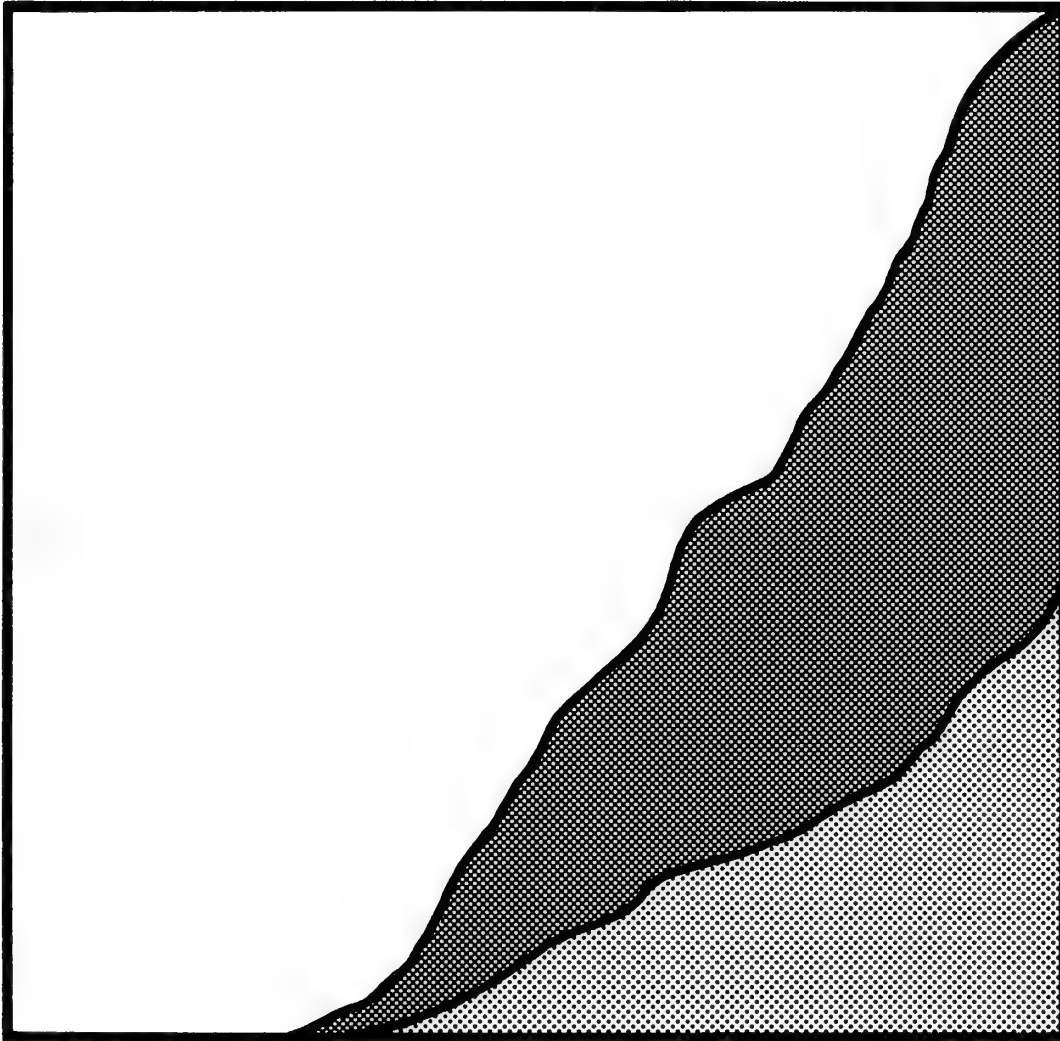
## Section VIII

Care should be used when reading the line graphs in Section VIII, Cancer Trends: Comparison of Incidence, Mortality, and Survival For Blacks and Whites. Each graph contains two dashed, horizontal lines. These lines are for reference only; they do not represent levels or trends of cancer incidence or mortality.



# Section I.

## Data Sources







# TABLE OF CONTENTS

SECTION I. DATA SOURCES		Page
Discussion .....		23
Figure I-1.	Surveillance, Epidemiology and End Results Program, National Cancer Institute	26
Table I-1.	Percent Distribution of Cancer Cases by Geographic Area for Eight Racial/Ethnic Groups, SEER Program, 1978-81 .....	27



# Section I. Data Sources

## Discussion

This report presents selected examples of cancer statistics in order to show comparisons between blacks, whites, and other racial and ethnic groups. The presentation displays in greater detail than in the past comparisons of the cancer experience of these groups. Differences between blacks and whites indicate where efforts must be directed to address the cancer needs of blacks in order to achieve improvement in incidence, mortality, and survival rates.

The data presented in this report are derived from two sources. Cancer mortality data are obtained from the National Center for Health Statistics (NCHS). Data tapes on all deaths in the United States are obtained annually from the NCHS and form the basis for all mortality statistics. Cancer incidence and survival data are derived from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute. The SEER Program collects information from 11 U.S. population-based cancer registries (Figure I-1). Cancer patients identified through SEER from 1978 to 1981 had the following racial/ethnic distribution:

Anglos (white)	84.7
Blacks	8.0
Hispanics	2.1
Native Americans	0.3
Chinese	0.8
Japanese	1.2
Filipinos	0.6
Native Hawaiians	0.4
Others	1.9
	<hr/> 100.0%

Table I-1 shows how the cancer cases for these eight racial/ethnic groups were distributed within the SEER geographic areas.

The SEER Program began in 1973 and presently includes six entire states (Connecticut, Hawaii, Iowa, New Mexico, New Jersey, and Utah), four large metropolitan areas (Atlanta, Detroit, San Francisco, and Seattle) and Puerto Rico. New Jersey joined the SEER Program in late 1983. It is now possible to analyze changes for the full ten years that SEER has been in operation. The majority of the SEER data on blacks is obtained from Atlanta, Detroit, and San Francisco. Information for this report comes from 9 of the 11 SEER registries; Puerto Rico and New Jersey are excluded.

## Definitions

**Rate:** An expression of the frequency of an event in an entire population. It is characterized by "counts of an event" during a specified time period. The total number of events — the numerator — is divided by the population at risk (or mid-year population) — the denominator. For example, the crude death rate is calculated by dividing the total number of deaths registered during the calendar year (January 1 to December 31) by the total population at the middle of the year (July 1). This is then multiplied by 100,000.

**Incidence rate:** The cancer incidence rate is the number of cancer cases newly diagnosed during a calendar year divided by the mid-year population and multiplied by 100,000.

**Mortality rate:** The cancer mortality rate is the number of deaths from cancer that occur during a calendar year in a specified population. It is expressed as a number per 100,000 population and includes those deaths where cancer is the reported underlying cause of death. This can be calculated for each specific type of cancer as well as for all cancer sites combined.

**Observed survival rate:** The proportion of newly diagnosed cancer patients surviving for a specified period of time after diagnosis.

**Relative survival rate:** The ratio of the observed survival rate for the patient group to the expected survival rate for persons in the general population similar to the patient group with respect to age, sex, race, and calendar year of observation. Since almost half the cancers occur in persons 65 years or older, many of these individuals die of other causes with no evidence of recurrence of the cancer. Thus, because it is obtained by adjusting observed survival for the normal life expectancy of the general population of the same age, the relative survival rate is an estimate of the chance of surviving the effects of cancer. The *five-year relative survival rate* then can be considered the proportion potentially curable.

**Age-specific Rate:** Age-specific cancer rates are calculated because the frequency of cancer incidence and mortality varies with age. By calculating separate incidence and mortality rates for each age group diversities often hidden in overall rates are more evident.

- **Incidence:** The age-specific cancer incidence rate is the number of new cases of cancer occurring to persons in a given age group during a calendar year divided by the mid-year population of all persons in that same age group. This is then multiplied by 100,000.
- **Mortality:** The age-specific mortality rate is the number of cancer deaths occurring to persons in a given age group during a calendar year divided by the mid-year population of all persons in that same age group. This is then multiplied by 100,000.

*Age-adjusted Rate:* An age-adjusted cancer rate is a weighted average of the age-specific cancer mortality (or incidence) rates where the weights are the numbers of persons in age groups of a standard population. This has the effect of eliminating age distribution differences in the two populations as a factor when comparing their mortality (or incidence) for all ages combined. For this report, the 1970 U.S. population is used as the standard.

*Standard error:* The standard error of a survival rate indicates the amount of sampling variability in the rate. Throughout this report, those rates for which the standard error is between 5 and 10 percent are indicated by superscript<sup>1</sup> and those with a standard error greater than 10 percent by superscript<sup>2</sup>. All other survival rates have standard errors less than 5 percent.

**Figure I-1**  
**Surveillance, Epidemiology and End Results Program**  
**National Cancer Institute**

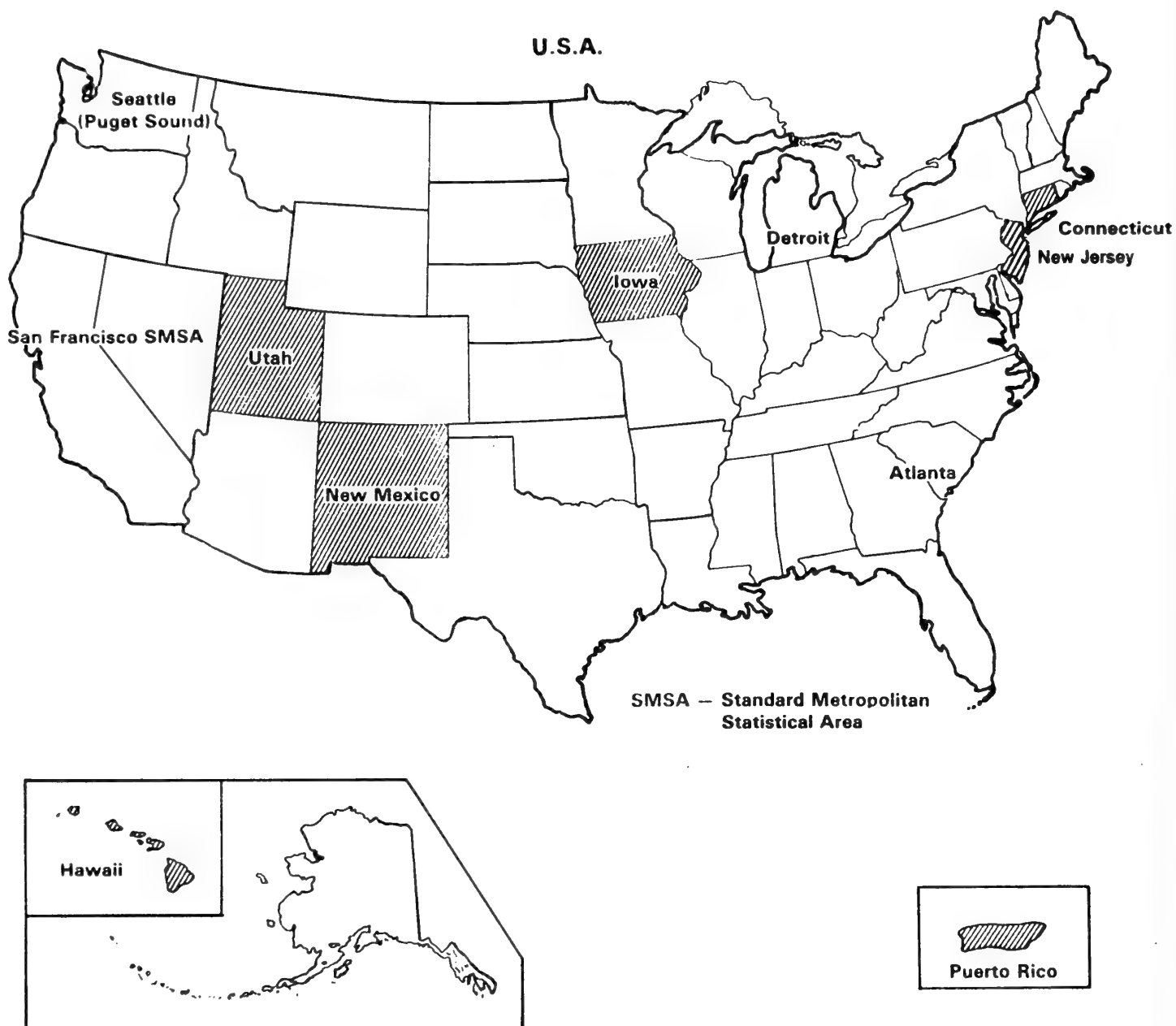


Table I-1

# Percent Distribution of Cancer Cases by Geographic Area, for Eight Racial/Ethnic Groups, SEER Program, 1978-81

Area	Total for all racial/ethnic groups <sup>2</sup>	Anglos <sup>3</sup>	Blacks	Hispanics	Japanese	Chinese	Filipinos	Native Hawaiians	Native Americans
Total numbers of cases	297,571	252,095	23,952	6,158	3,682	2,299	1,815	1,331	872
Percent residing in:									
All areas <sup>1</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
San Francisco-Oakland	16.8	15.7	20.4	33.5	9.2	64.1	36.1	2.4	3.8
Connecticut	16.9	18.8	8.6	5.4	0.2	1.0	0.1	0.1	1.4
Detroit	19.4	18.3	45.9	1.4	0.4	1.4	1.7	0.1	1.5
Hawaii	3.4	1.4	0.2	—	82.9	28.6	55.8	97.0	—
Iowa	15.1	17.6	1.8	1.6	0.2	0.2	0.2	—	1.7
New Mexico	4.4	3.8	0.8	51.3	0.1	0.2	—	—	42.4
Seattle	12.7	13.7	3.2	1.6	5.6	3.8	6.6	0.4	12.6
Utah	4.3	4.8	0.2	4.8	1.3	0.2	0.2	—	3.2
Atlanta	3.1	5.6	16.6	0.6	0.1	0.3	0.1	0.1	0.4
Arizona Indians	0.1	—	—	—	—	—	—	—	32.7

<sup>1</sup> Puerto Rico and New Jersey are not included.

<sup>2</sup> Total includes 5,367 cases of unknown and other racial/ethnic background.

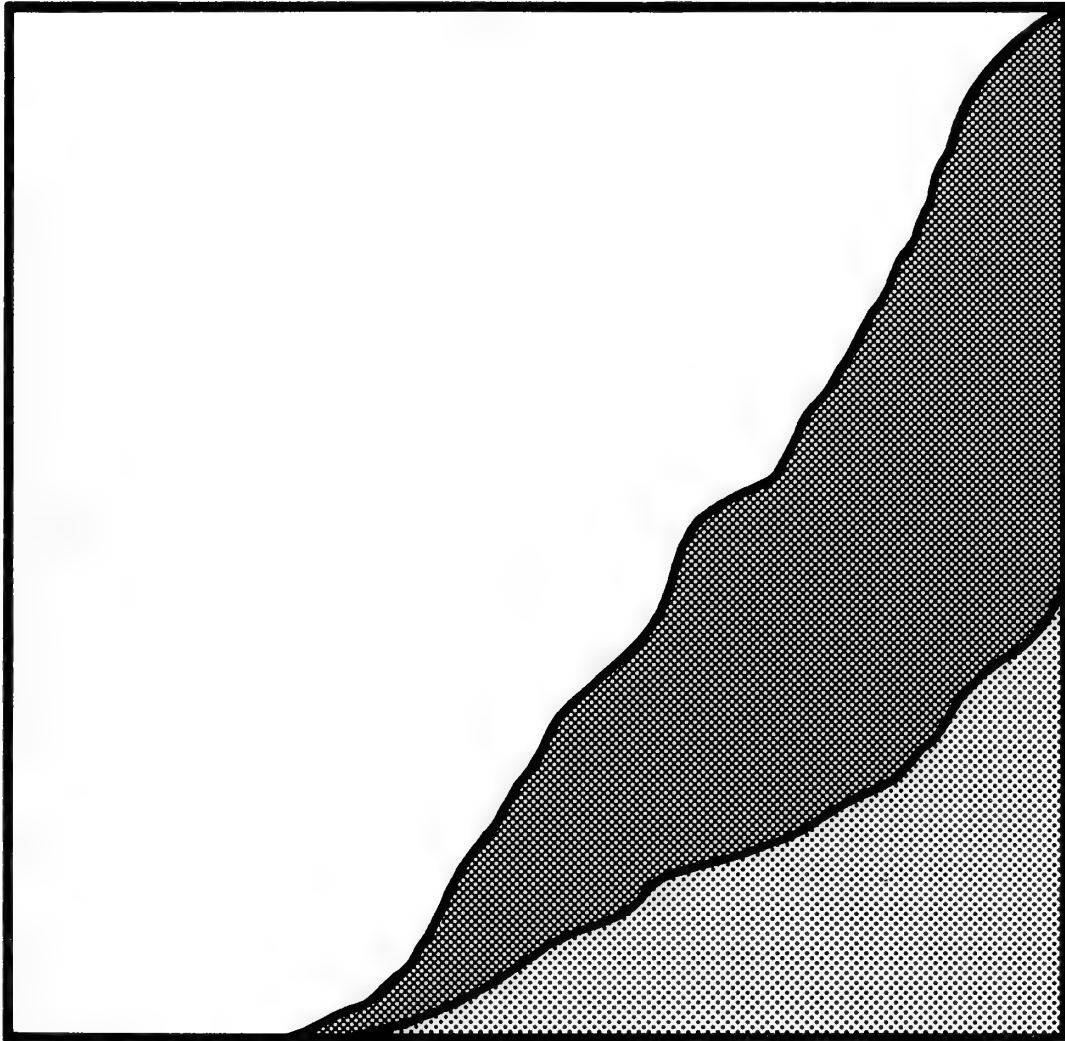
<sup>3</sup> Caucasians not of Hispanic origin or surname.





# **Section II.**

## **Cancer Incidence For Blacks, Whites, And Other Groups**





# TABLE OF CONTENTS

SECTION II. CANCER INCIDENCE FOR BLACKS, WHITES, AND OTHER GROUPS		Page
Discussion .....		33
Table II-1.	Average Annual Age-adjusted Cancer Incidence Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1978-81 .	35
<i>Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81</i>		
Figure II-1.	All Sites Combined .....	37
Figure II-2.	All Sites Combined, Male .....	38
Figure II-3.	All Sites Combined, Female .....	39
Figure II-4.	Bladder, Male .....	40
Figure II-5.	Bladder, Female .....	41
Figure II-6.	Breast, Female .....	42
Figure II-7.	Cervix Uteri .....	43
Figure II-8.	Colon, Male .....	44
Figure II-9.	Colon, Female .....	45
Figure II-10.	Colon and Rectum, Male .....	46
Figure II-11.	Colon and Rectum, Female .....	47
Figure II-12.	Corpus Uteri .....	49
Figure II-13.	Esophagus, Male .....	50
Figure II-14.	Esophagus, Female .....	51
Figure II-15.	Larynx, Male .....	52
Figure II-16.	Larynx, Female .....	53
Figure II-17.	Lung, Male .....	54
Figure II-18.	Lung, Female .....	55
Figure II-19.	Multiple Myeloma, Male .....	56
Figure II-20.	Multiple Myeloma, Female .....	57
Figure II-21.	Ovary .....	59
Figure II-22.	Pancreas, Male .....	60
Figure II-23.	Pancreas, Female .....	61
Figure II-24.	Prostate .....	63
Figure II-25.	Rectum, Male .....	64
Figure II-26.	Rectum, Female .....	65
Figure II-27.	Stomach, Male .....	66
Figure II-28.	Stomach, Female .....	67

*Age-adjusted Cancer Incidence Rates per 100,000 by Racial/Ethnic Group: 1978–81*

Figure II-29.	All Sites Combined . . . . .	68
Figure II-30.	Bladder . . . . .	69
Figure II-31.	Breast, Female . . . . .	70
Figure II-32.	Cervix Uteri . . . . .	71
Figure II-33.	Colon . . . . .	72
Figure II-34.	Colon and Rectum . . . . .	73
Figure II-35.	Corpus Uteri . . . . .	74
Figure II-36.	Esophagus . . . . .	75
Figure II-37.	Larynx . . . . .	76
Figure II-38.	Lung . . . . .	77
Figure II-39.	Multiple Myeloma . . . . .	78
Figure II-40.	Ovary . . . . .	79
Figure II-41.	Pancreas . . . . .	80
Figure II-42.	Prostate . . . . .	81
Figure II-43.	Rectum . . . . .	82
Figure II-44.	Stomach . . . . .	83

## Section II. Cancer Incidence for Blacks, Whites, and Other Groups

### Discussion

The information about cancer incidence in this section is based on SEER data collected between 1978 and 1981. Cancer incidence rates measure the rate of occurrence of new cases of cancer during a year per 100,000 persons in that population. The cancer incidence rates presented here are an average of four annual cancer incidence rates: 1978, 1979, 1980, and 1981.

The first table presents average annual, age-adjusted cancer incidence rates for blacks, whites, and other racial/ethnic groups. Two sets of figures follow: 1) line graphs comparing age-specific incidence rates for selected cancer sites for blacks and whites, and 2) bar graphs showing age-adjusted cancer incidence rates for blacks, whites, and other racial/ethnic groups.

### Highlights

- Among the major racial/ethnic groups, blacks had the highest overall incidence rate for cancer followed by Native Hawaiians and then whites. Native Americans had the lowest cancer incidence rate.
- Among the major racial/ethnic groups for which data are available:
  - Blacks had the highest incidence rates for cancers of the female breast (for women under age 40), esophagus, colon, larynx, lung (male), multiple myeloma, pancreas, and prostate.
  - Whites had the highest incidence rates for cancers of the bladder and ovary.
  - Native Americans had the highest incidence rate for cancer of the cervix uteri. They had the lowest incidence rates for cancers of the bladder, colon, rectum, larynx, male and female lung, female breast, corpus uteri, pancreas, and ovary.
  - Native Hawaiians had the highest incidence rates for cancers of the female breast (all ages combined and for women age 40 and above), ovary, corpus uteri, stomach, and lung (female).
  - Japanese-Americans had the highest incidence rates for cancers of the rectum and for the colon and rectum combined. They had the lowest incidence rates for cancers of the cervix uteri and multiple myeloma.
  - Hispanics had the lowest incidence rate for cancer of the esophagus.
  - Chinese-Americans had the lowest incidence rate for cancer of the prostate gland.
  - Filipinos had the lowest incidence rate for cancer of the stomach.

- Blacks were nearly four times as likely as whites to have cancer of the esophagus and more than twice as likely to have multiple myeloma.
- Black females were more than twice as likely as white females to have cancer of the cervix uteri.
- After ages 35-39 blacks had higher age-specific incidence rates for all cancer sites combined than whites. This difference increases to ages 55-59 and then decreases until ages 70-74 where it begins to increase again.

Table II-1

**Average Annual Age-adjusted  
Cancer Incidence Rates per 100,000  
by Primary Site and Racial/Ethnic Group,  
SEER Program, 1978-81**

Primary Site	Whites	Blacks	Hispanics*	Japanese	Chinese	Filipinos	Native Hawaiians	Native Americans
All sites	335.0	372.5	246.2	247.8	252.9	222.4	357.9	164.2
Bladder	15.4	8.6	8.2	7.7	7.7	5.1	8.2	1.1
Breast, Female	86.5	71.9	54.1	53.1	54.0	43.4	111.1	28.5
Ages <40	8.2	10.7	7.9	8.6	7.4	7.1	7.1	4.0
Ages 40+	221.1	179.3	134.9	146.5	141.0	117.0	300.0	71.4
Cervix Uteri	8.8	20.2	17.7	7.6	11.2	8.8	14.1	22.6
Colon & Rectum	49.6	48.9	25.2	50.4	40.8	30.1	32.7	9.9
Colon	34.6	37.9	15.8	34.0	27.7	17.7	18.4	8.0
Rectum	15.0	11.7	9.4	16.4	13.1	12.4	14.3	1.9
Corpus Uteri	25.1	13.4	11.1	18.6	17.6	11.7	27.1	2.6
Esophagus	3.0	11.5	1.6	2.4	3.4	3.6	6.4	2.4
Larynx	4.6	6.6	2.6	2.6	1.9	1.8	5.2	0.9
Lung, Male	81.0	119.0	34.3	45.1	62.6	38.1	100.9	14.6
Lung, Female	28.2	30.5	13.0	14.1	31.2	18.4	38.6	3.1
Multiple Myeloma	3.4	7.9	2.5	1.2	1.6	4.1	5.5	2.8
Ovary	13.6	9.5	10.4	8.7	9.1	9.4	13.5	3.2
Pancreas	8.9	13.6	10.8	7.4	9.3	6.7	10.0	6.0
Prostate	75.1	120.3	76.5	44.2	26.1	48.9	57.9	45.4
Stomach	8.0	13.8	15.7	27.9	9.0	7.0	32.4	19.3

\* Cancer incidence data for Hispanics come from New Mexico only.





Figure II-1

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## All Sites Combined

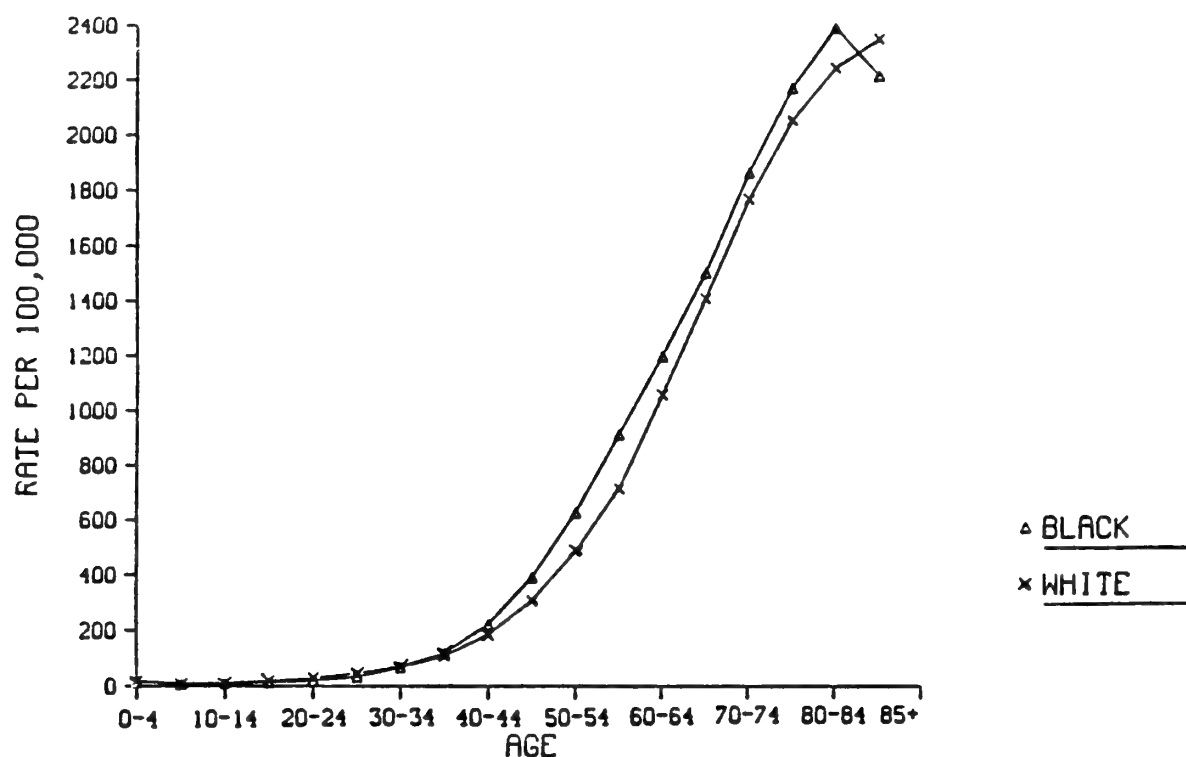


Figure II-2

# Age-specific Cancer Incidence Rates per 100,000 by Age for Blacks and Whites: 1978-81

## All Sites Combined Male

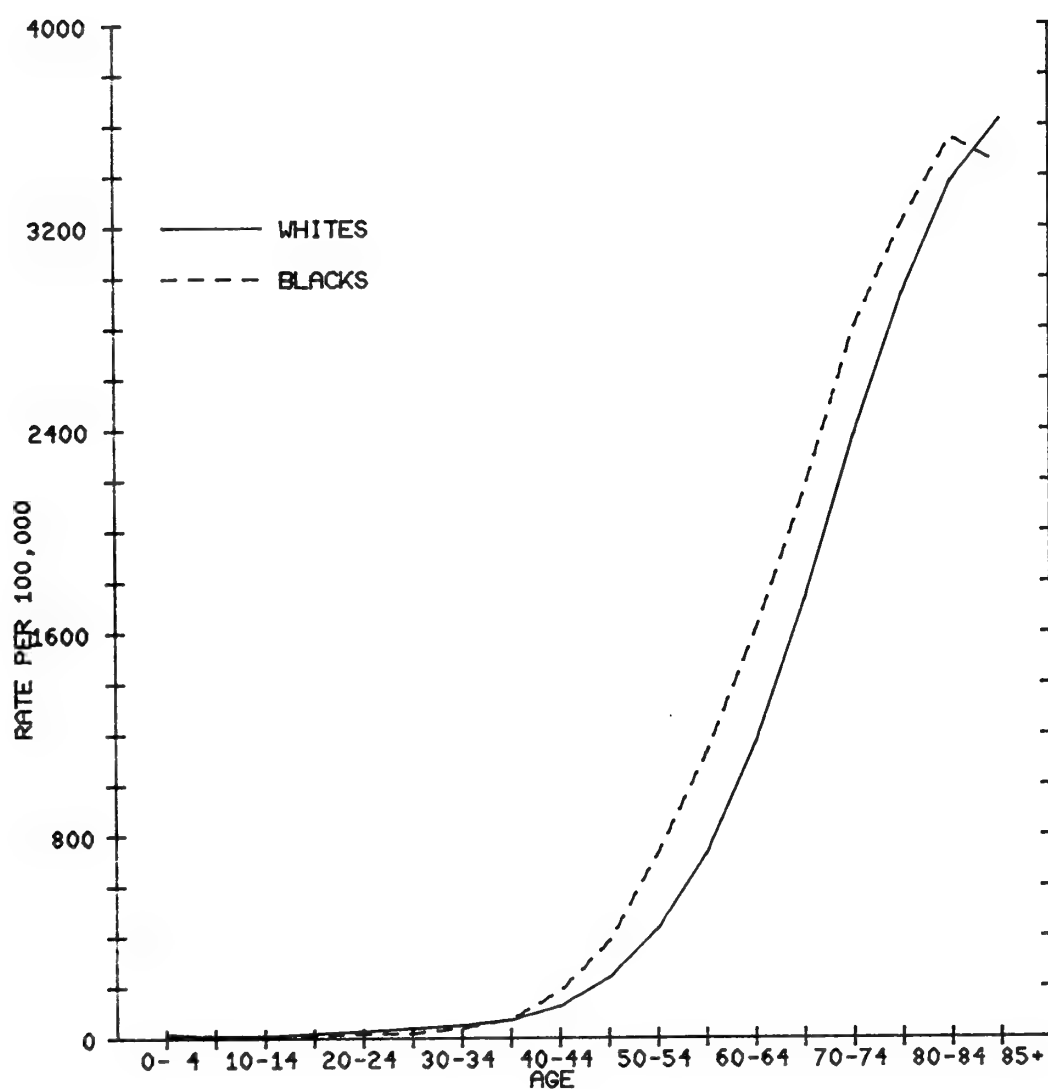


Figure II-3

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## All Sites Combined Female

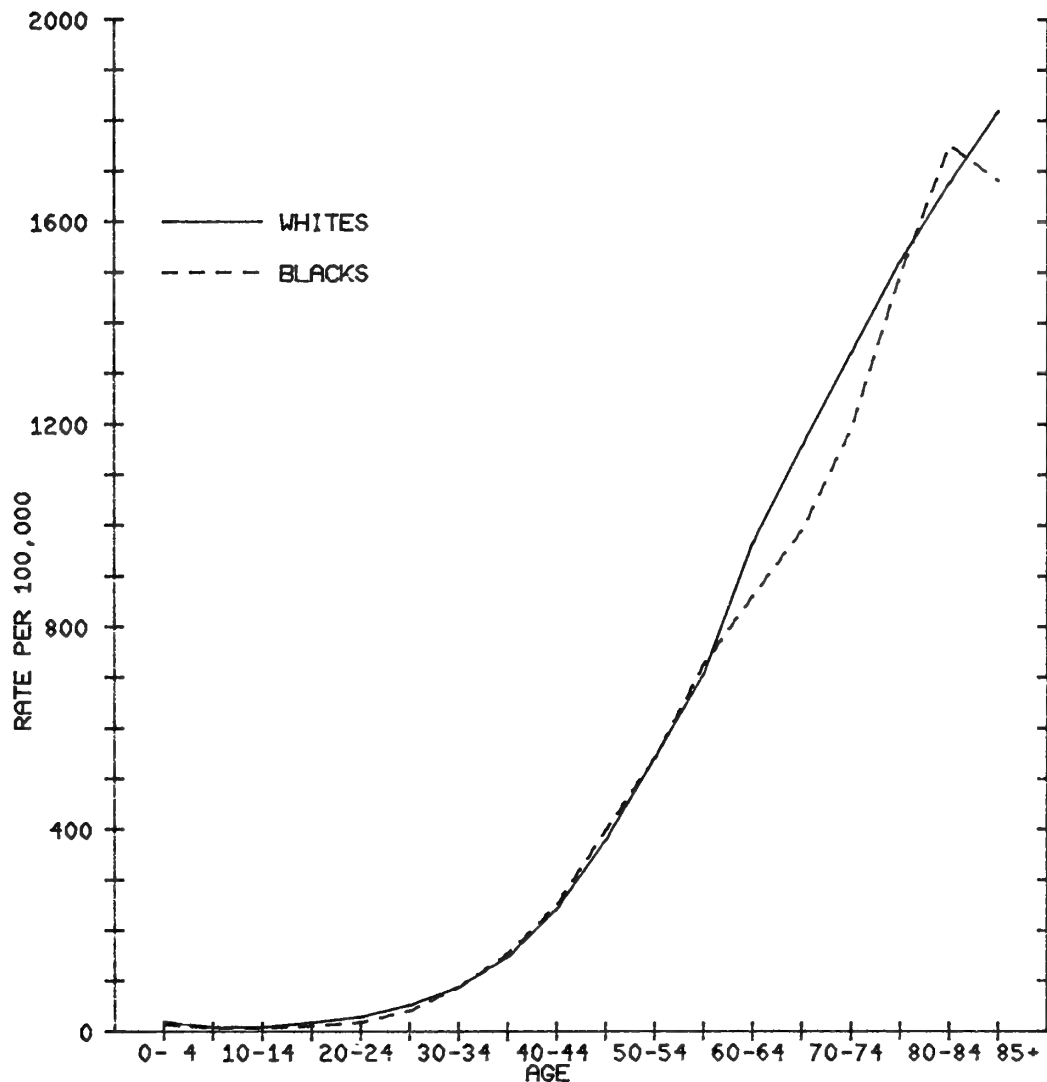


Figure II-4

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Bladder Male

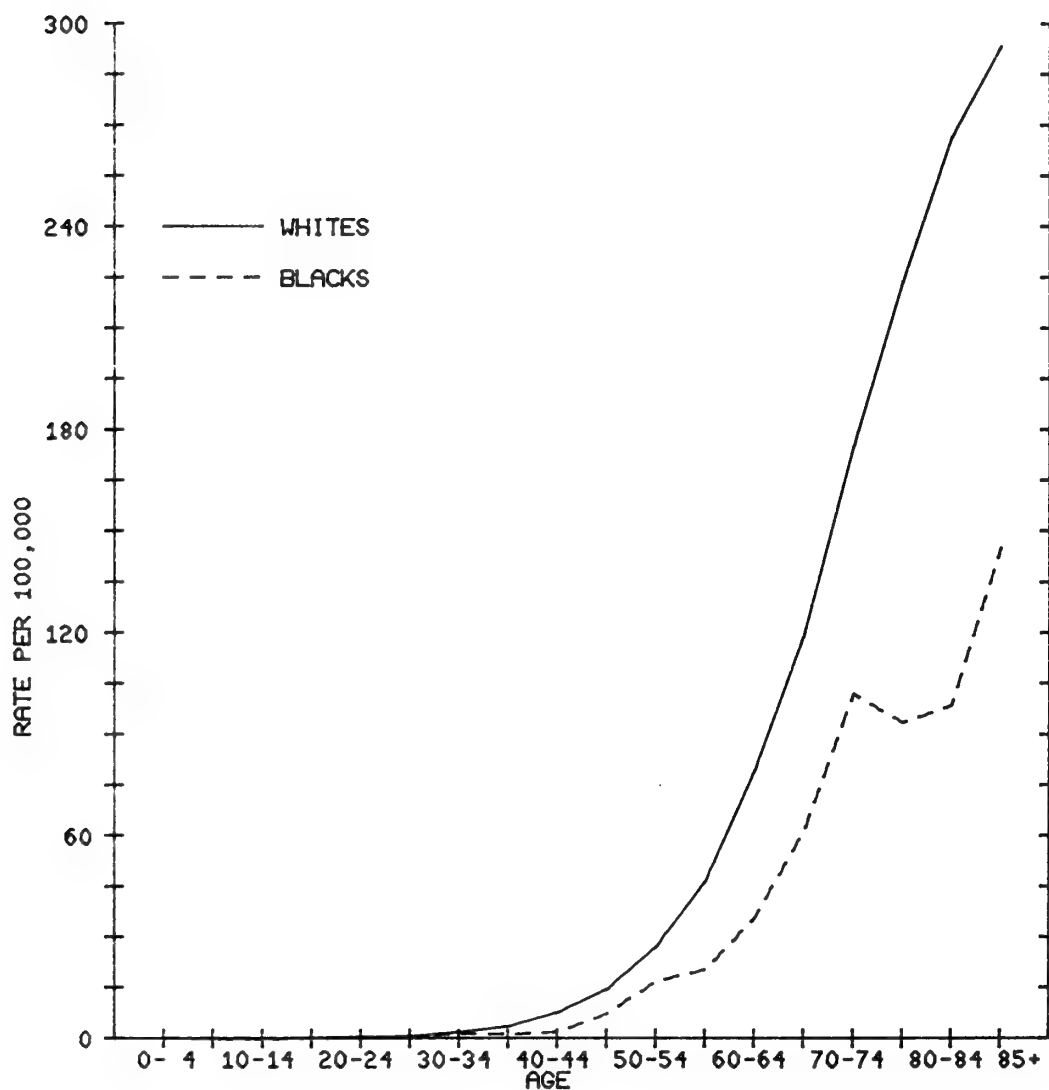


Figure II-5

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Bladder Female

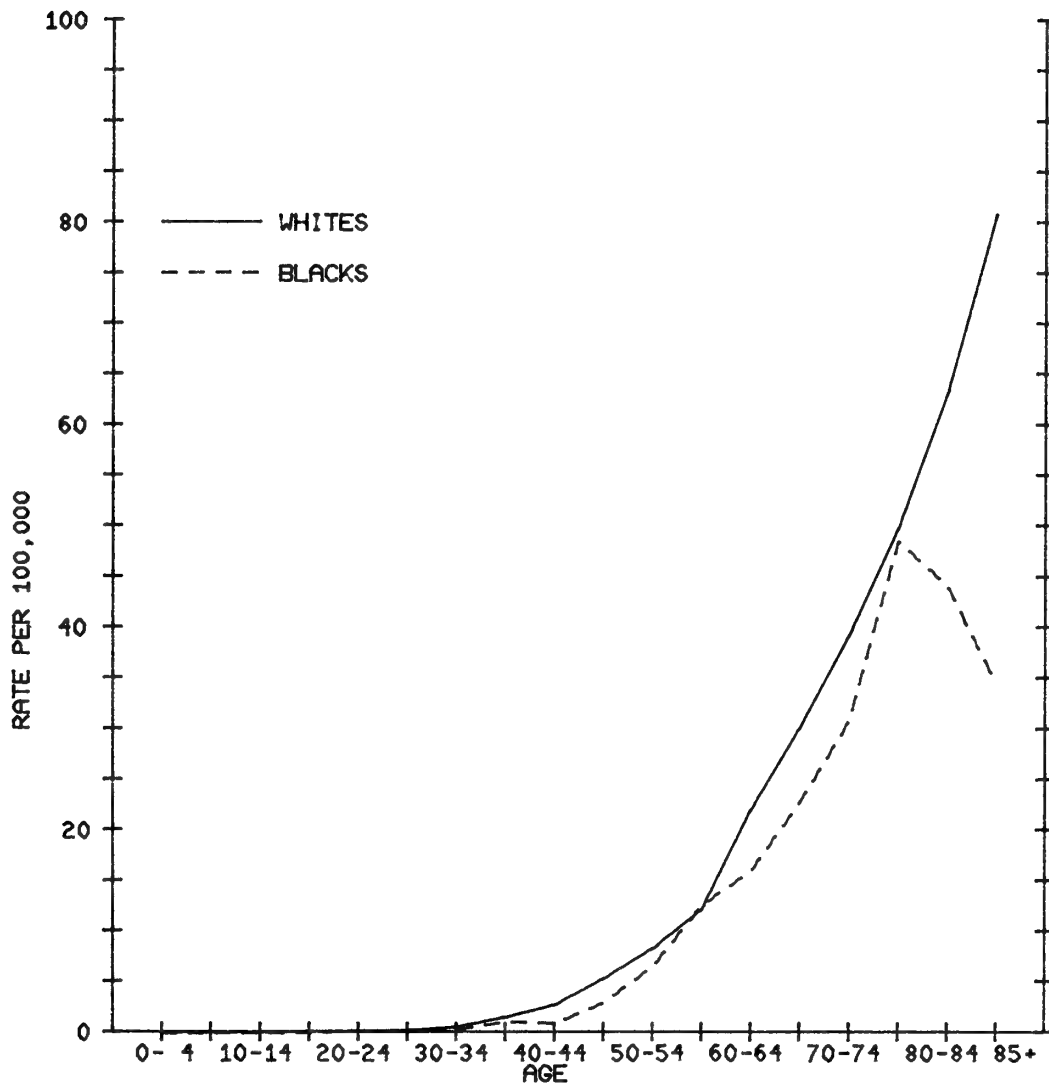


Figure II-6

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Breast Female

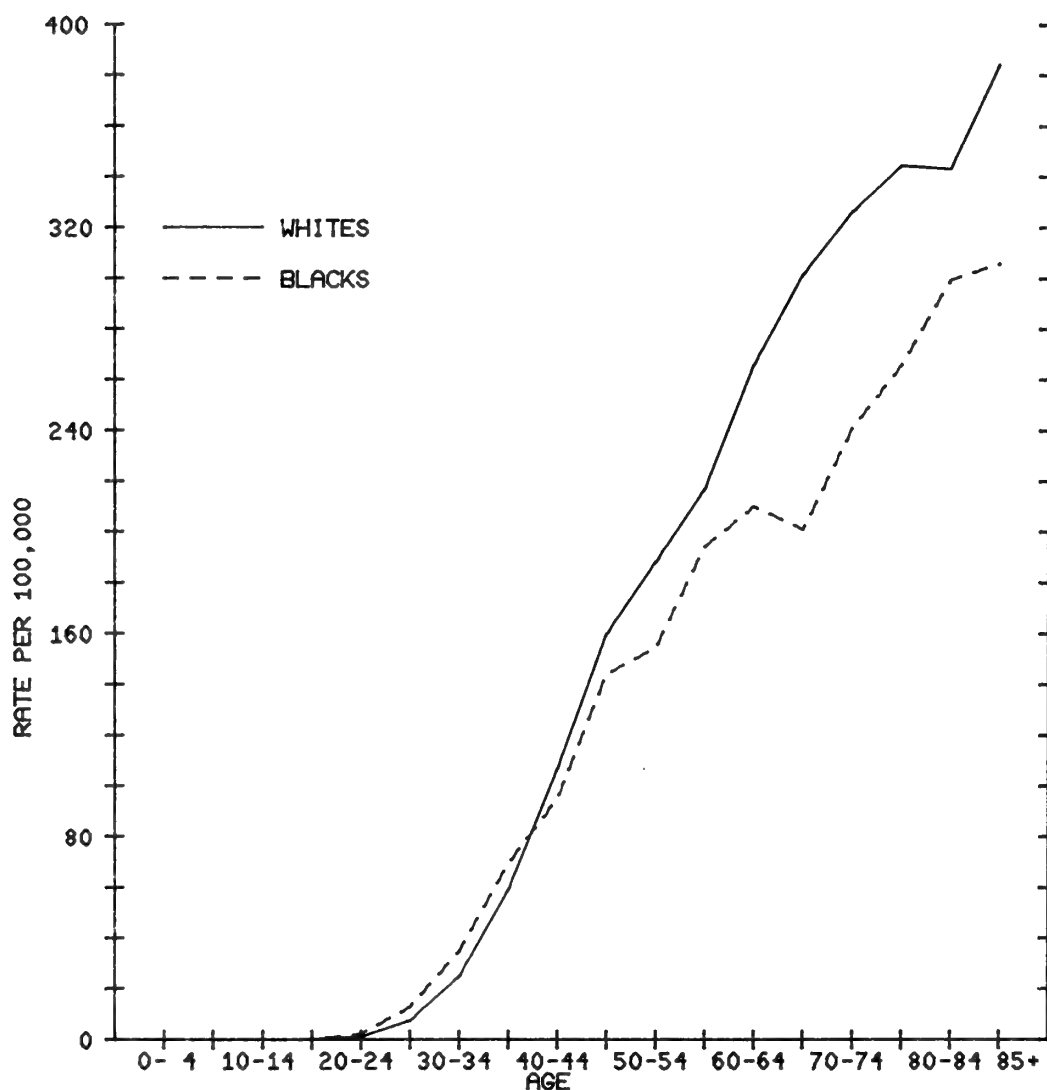


Figure II-7

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Cervix Uteri

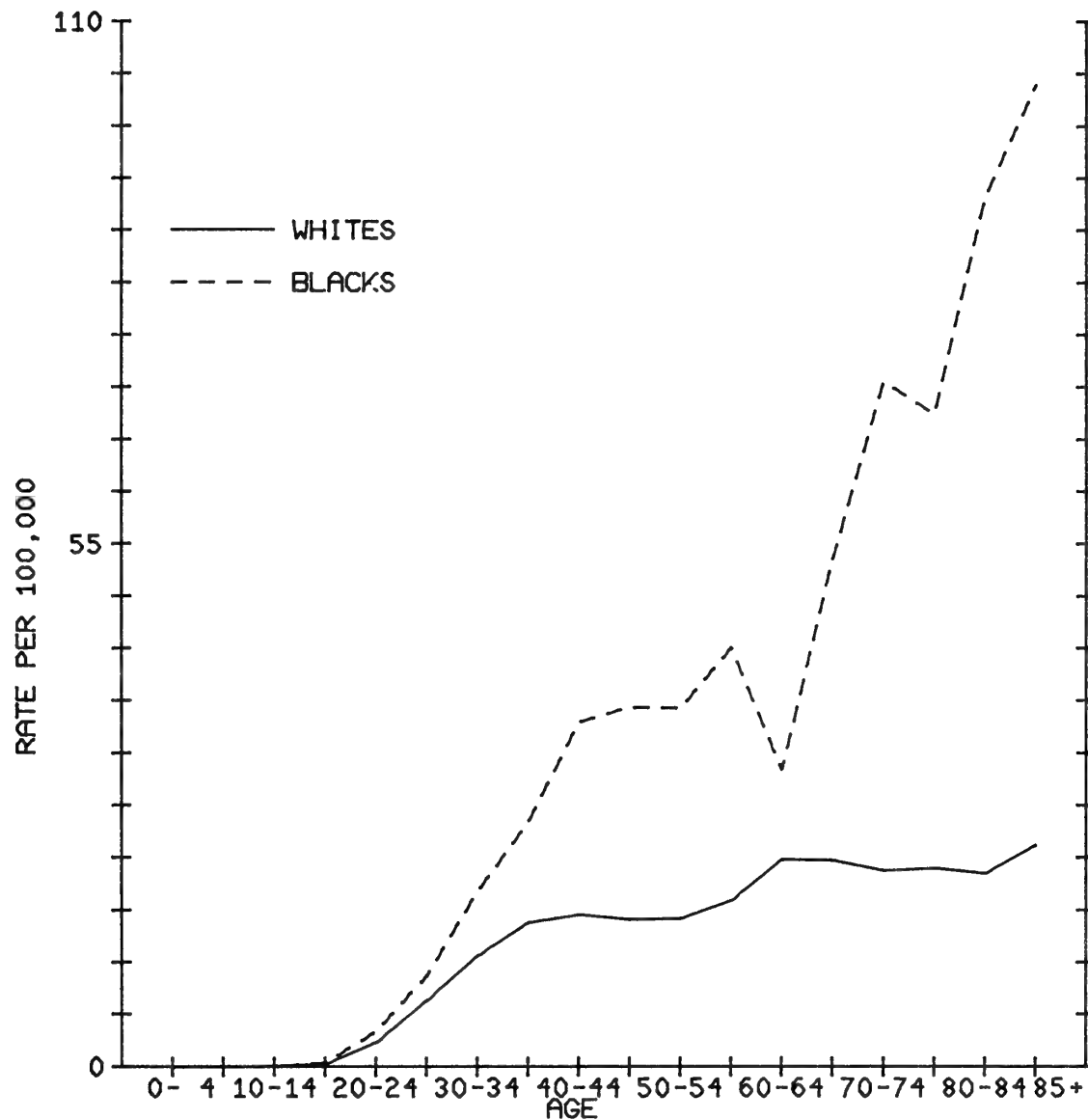


Figure II-8

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Colon Male

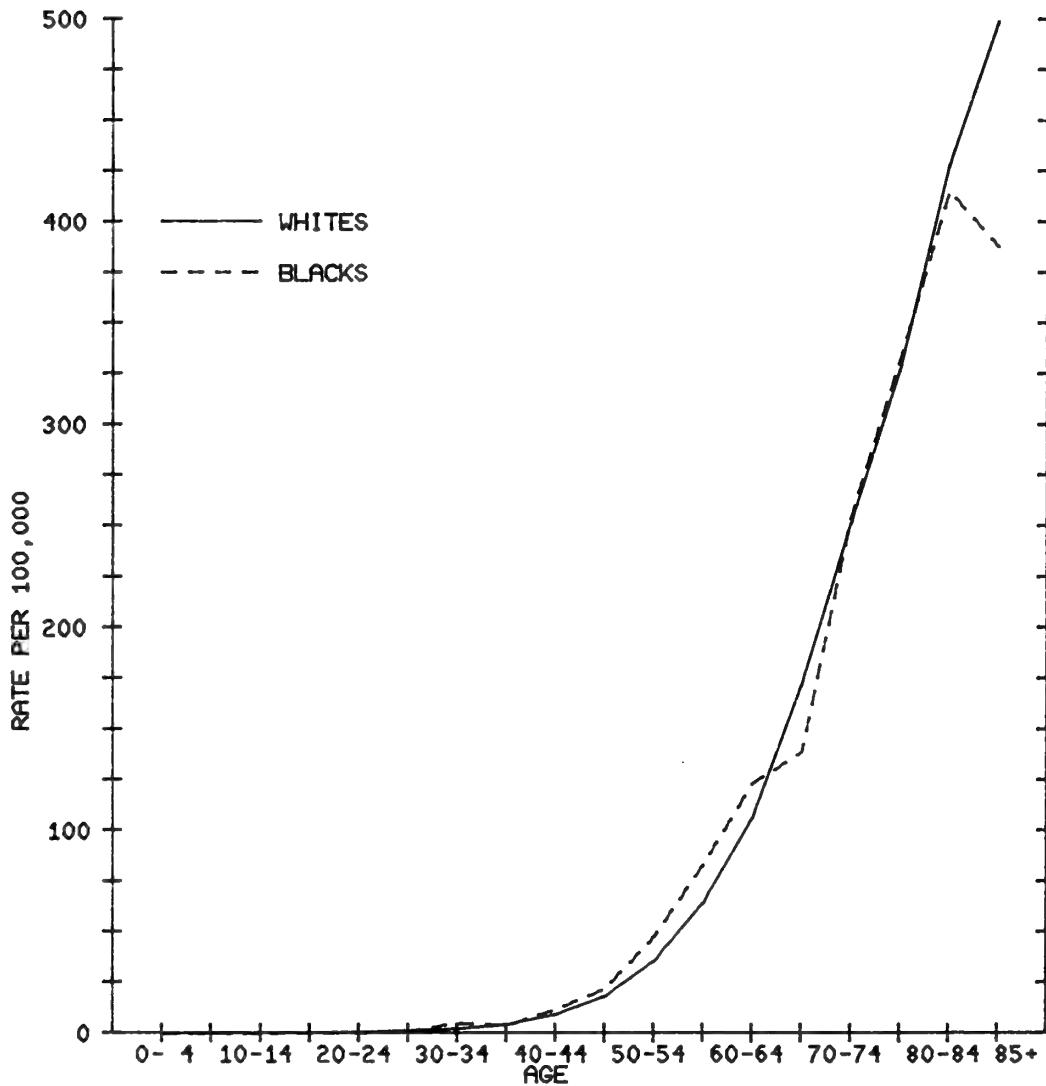




Figure II-9

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Colon Female

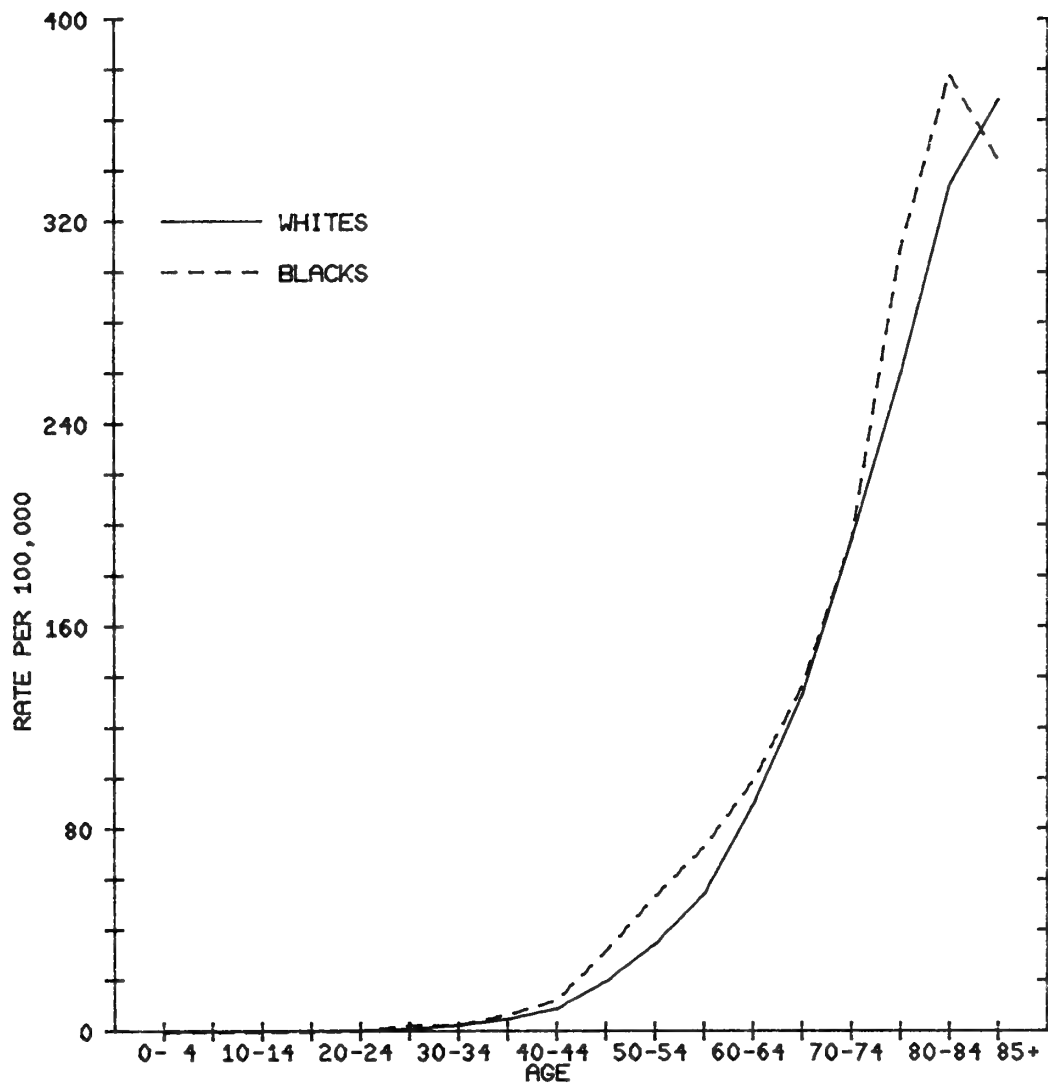


Figure II-10

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Colon and Rectum Male

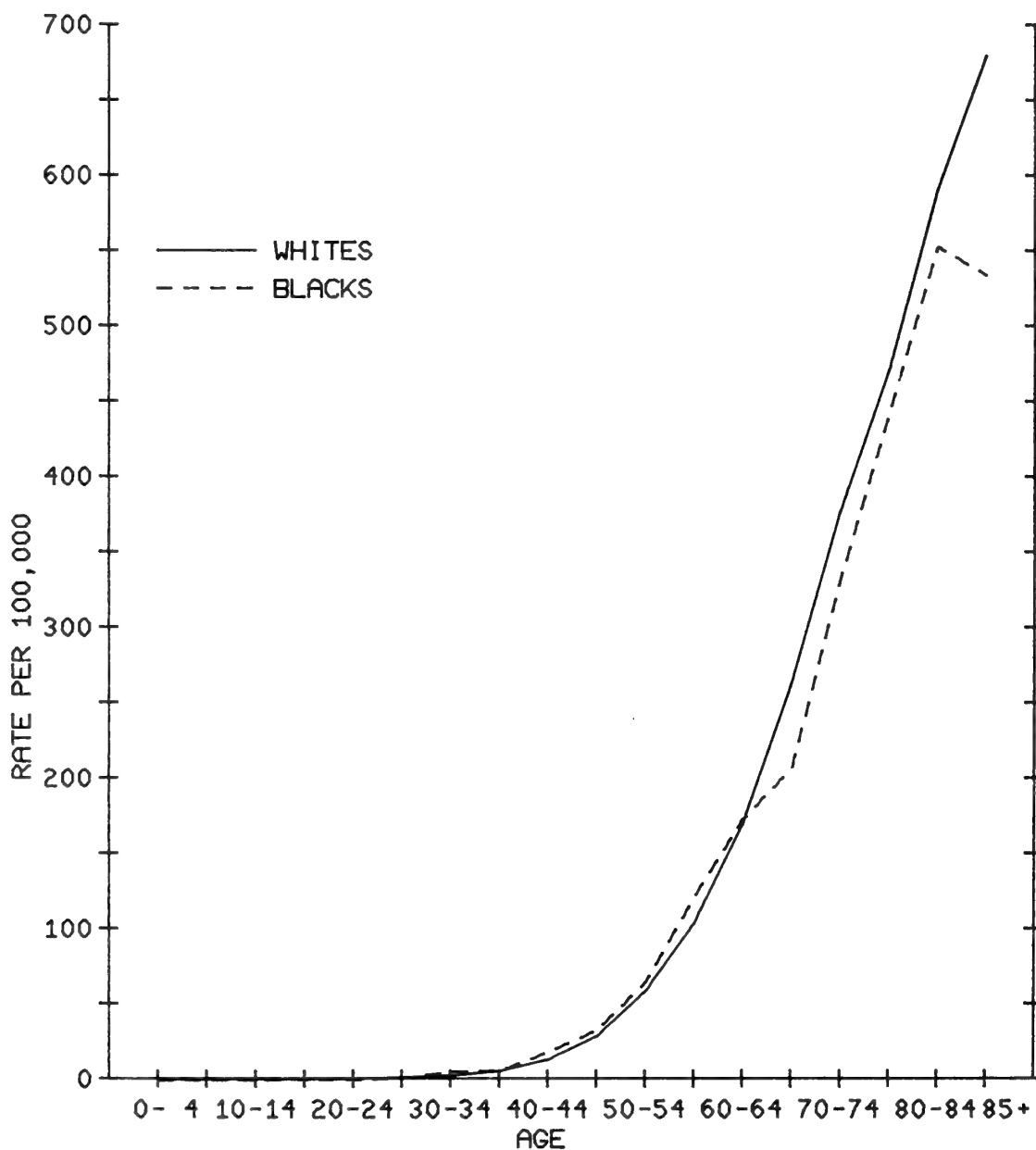


Figure II-11

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Colon and Rectum Female

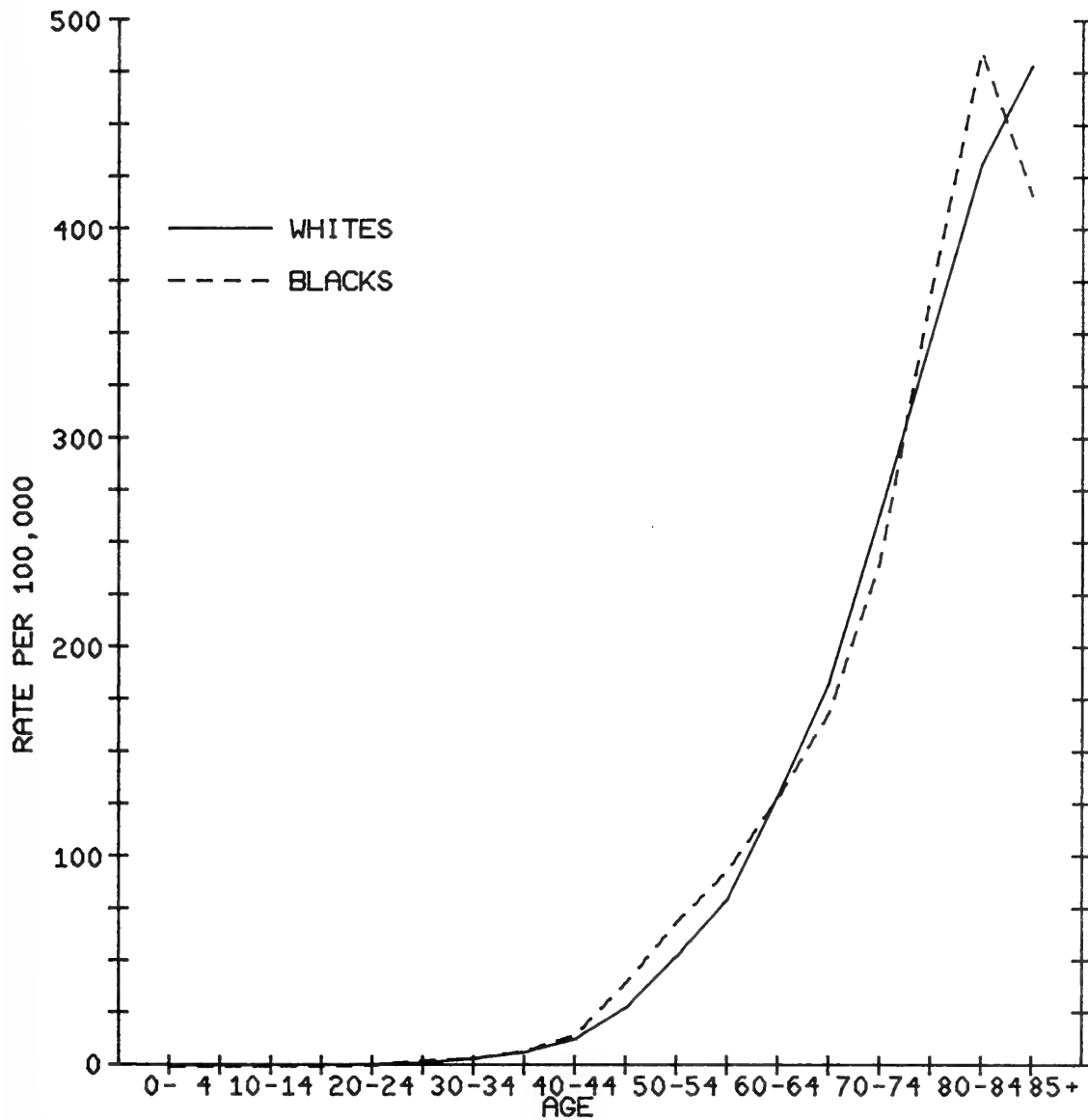




Figure II-12

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Corpus Uteri

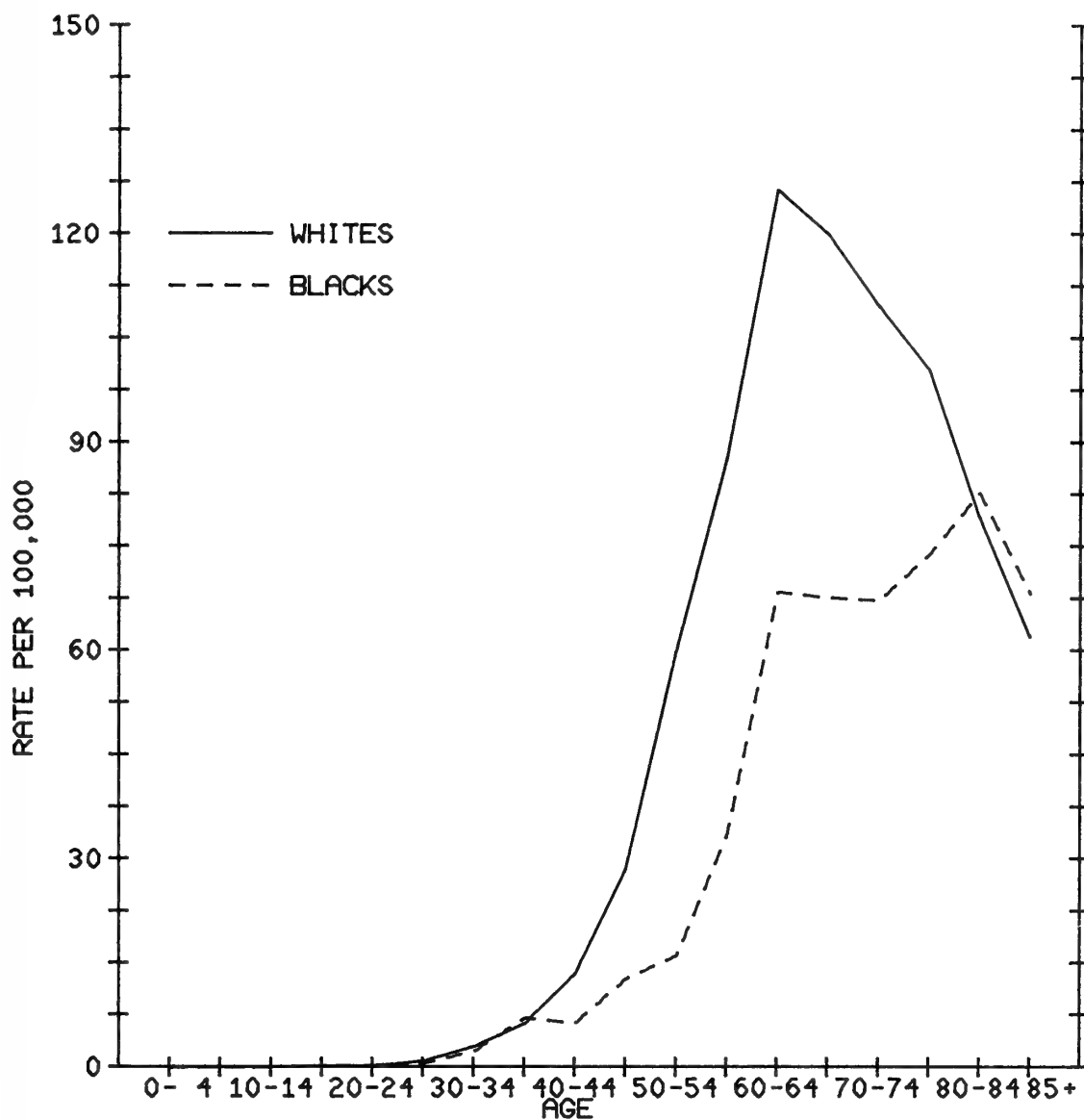


Figure II-13

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Esophagus Male

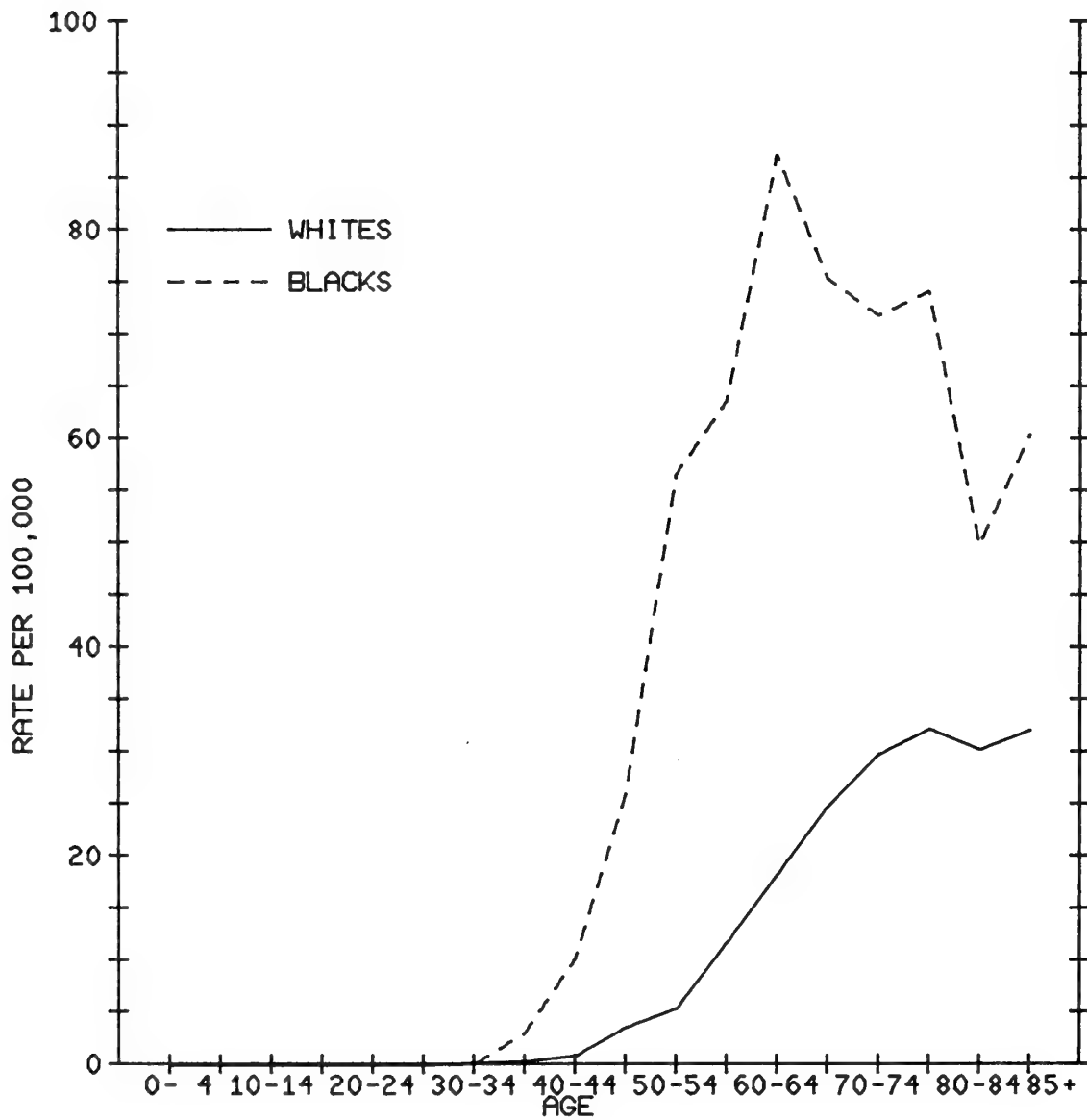


Figure II-14

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Esophagus Female

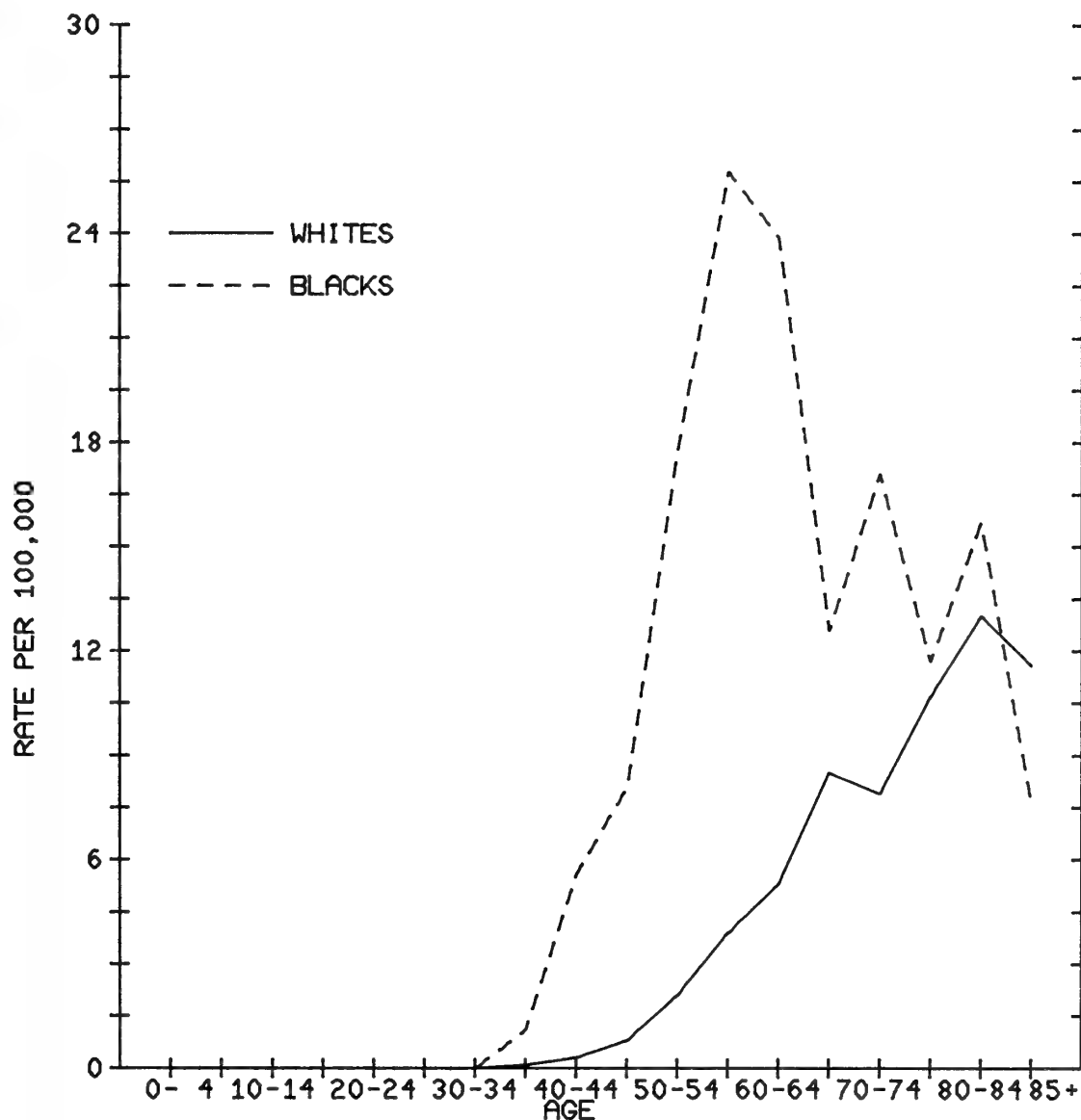


Figure II-15

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Larynx Male

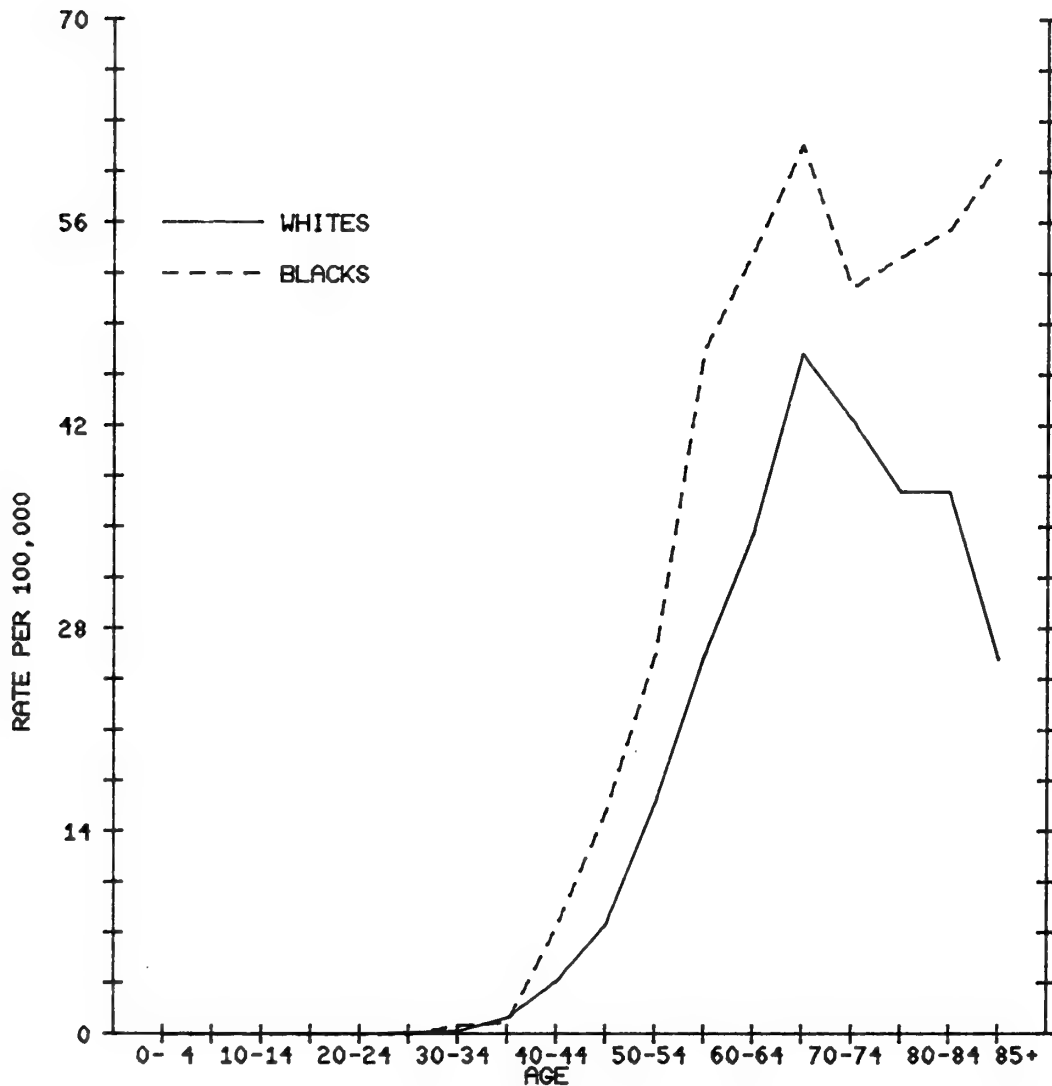




Figure II-16

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Larynx Female

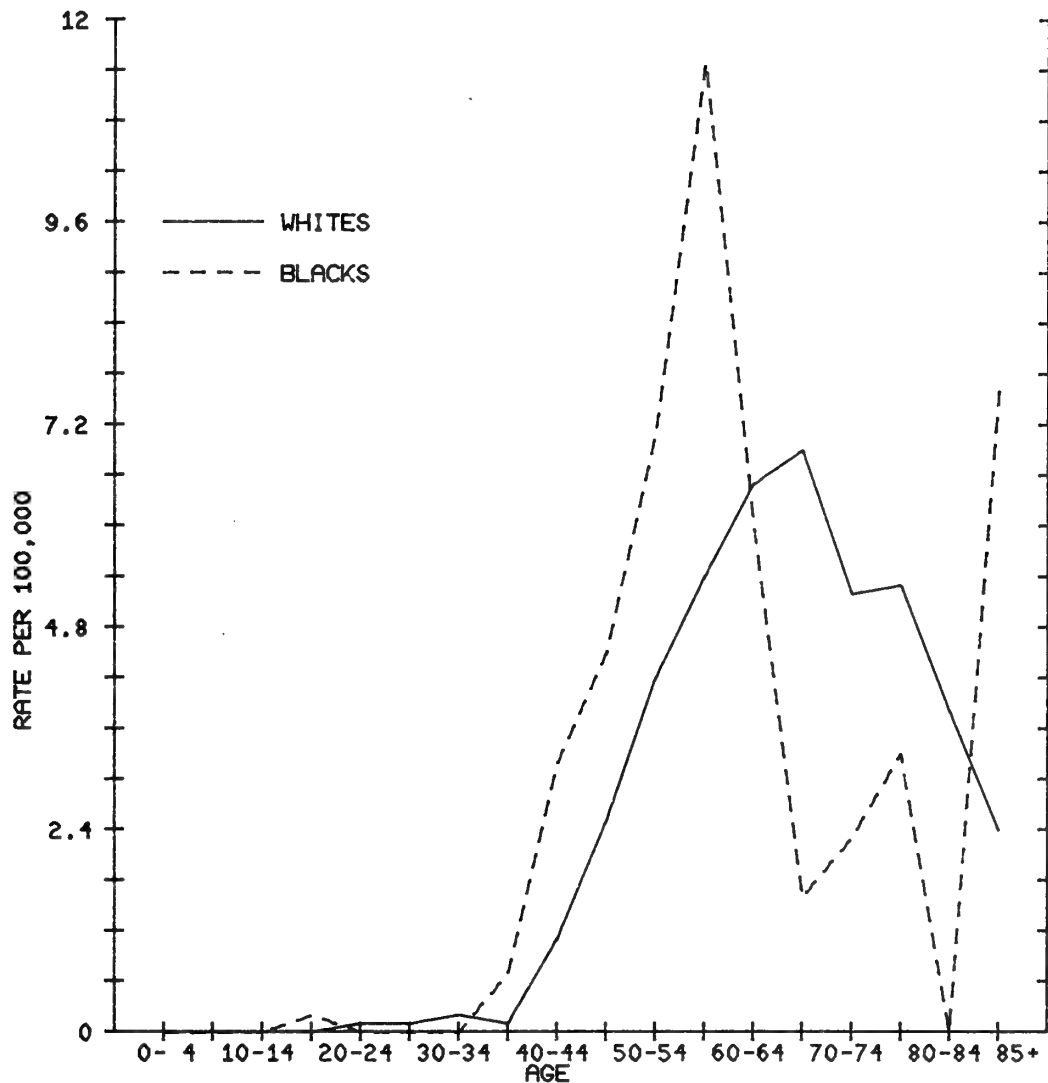


Figure II-17

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Lung Male

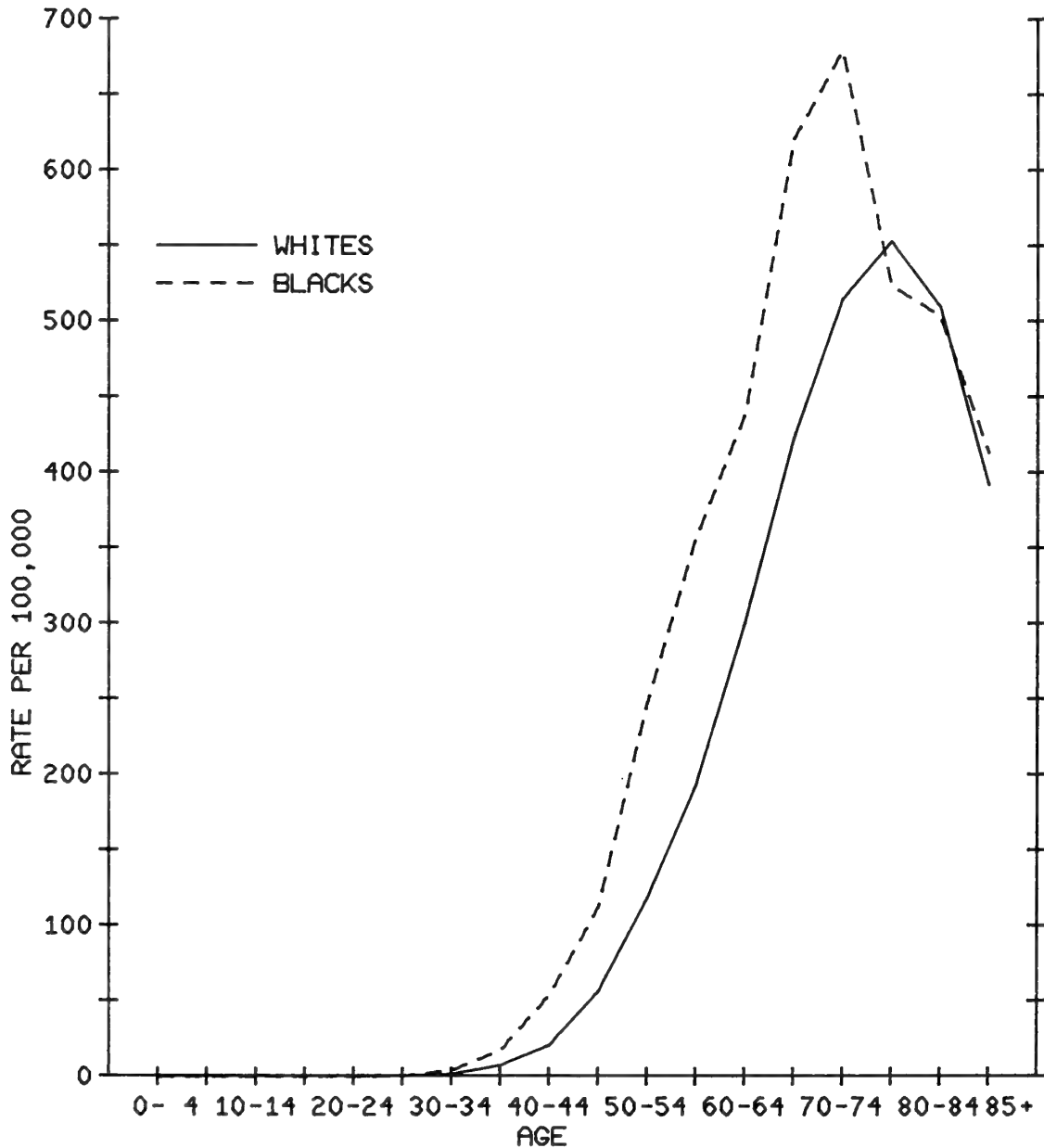


Figure II-18

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Lung Female

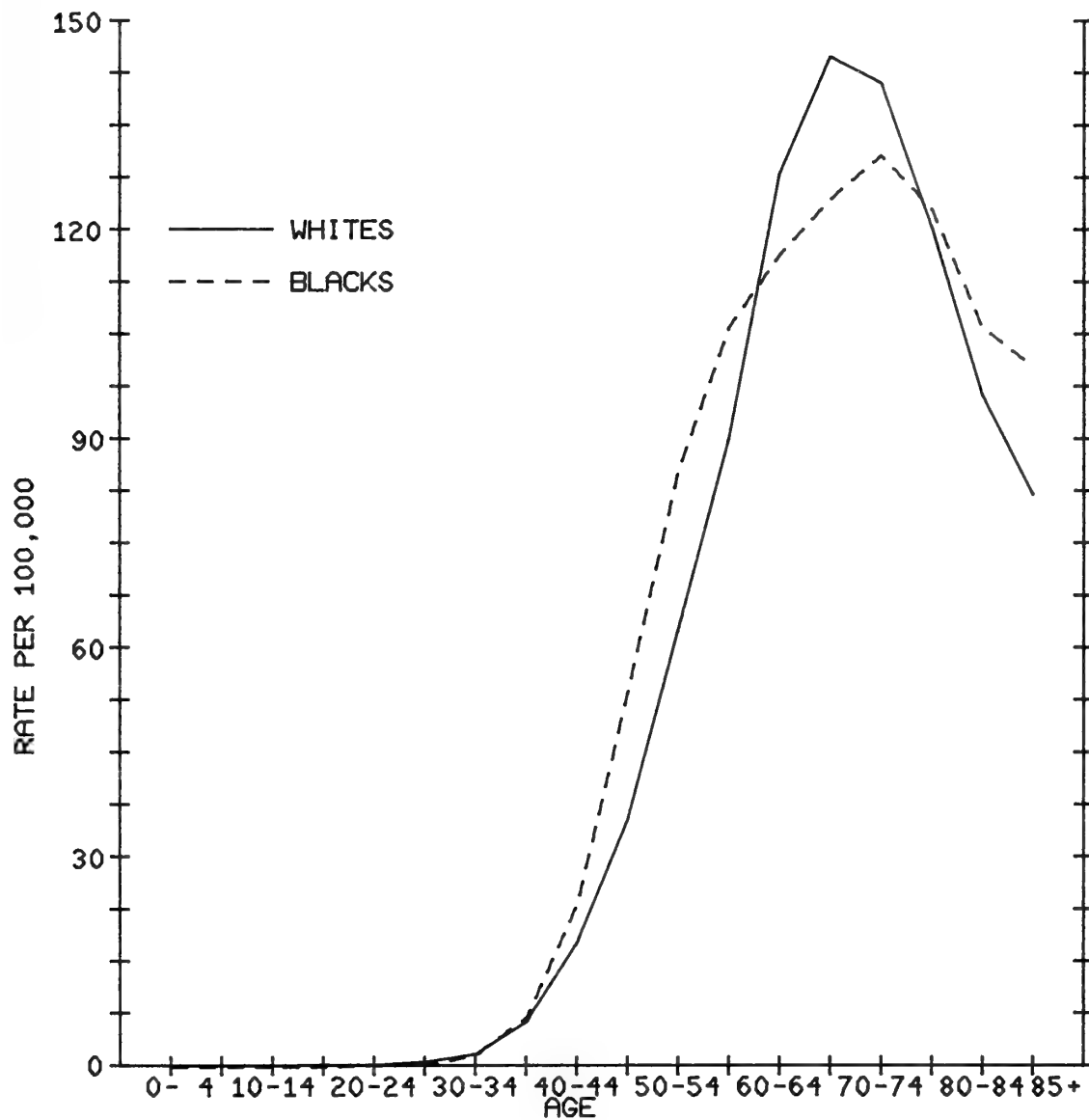


Figure II-19

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Multiple Myeloma Male

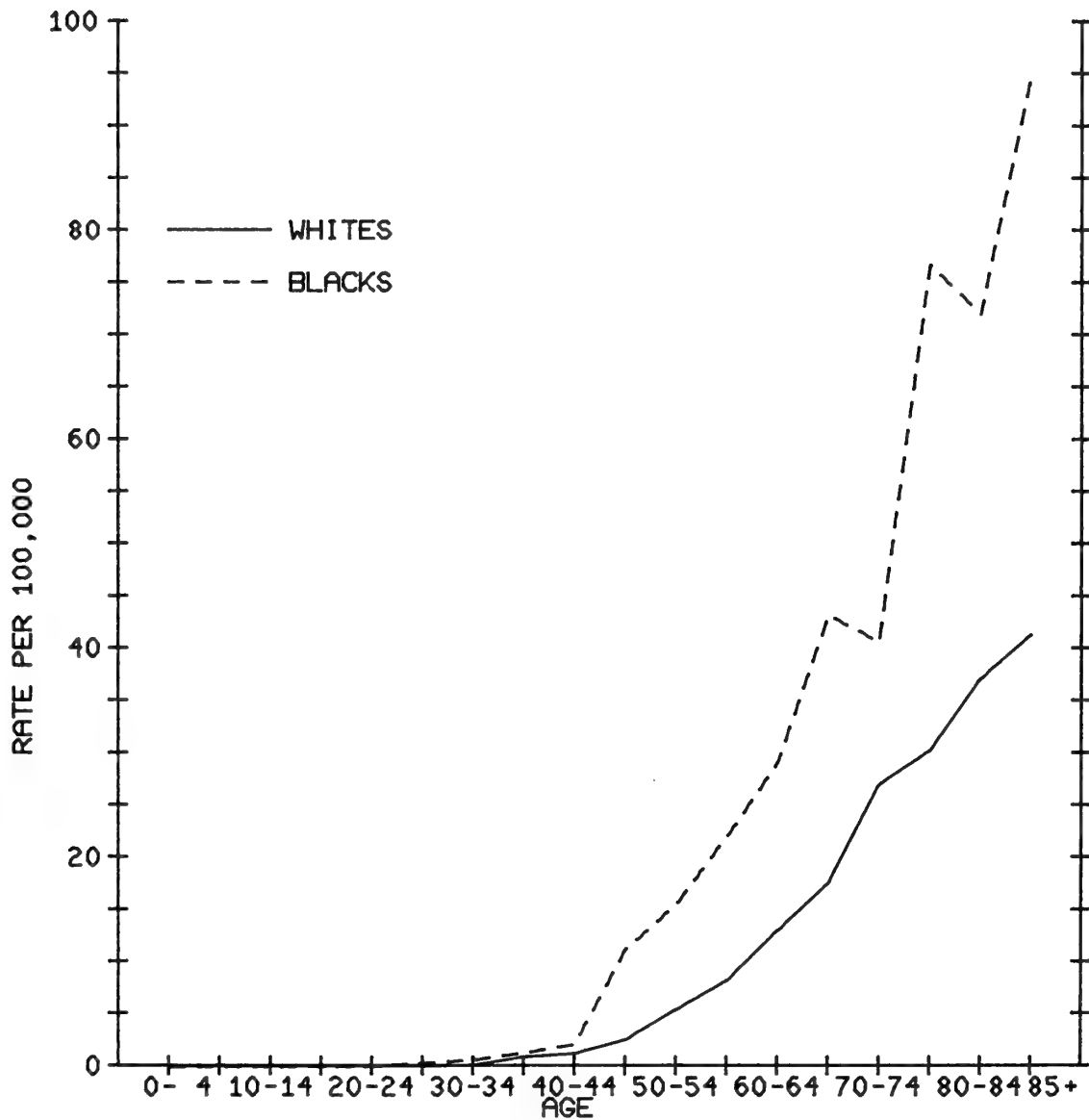


Figure II-20

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Multiple Myeloma Female

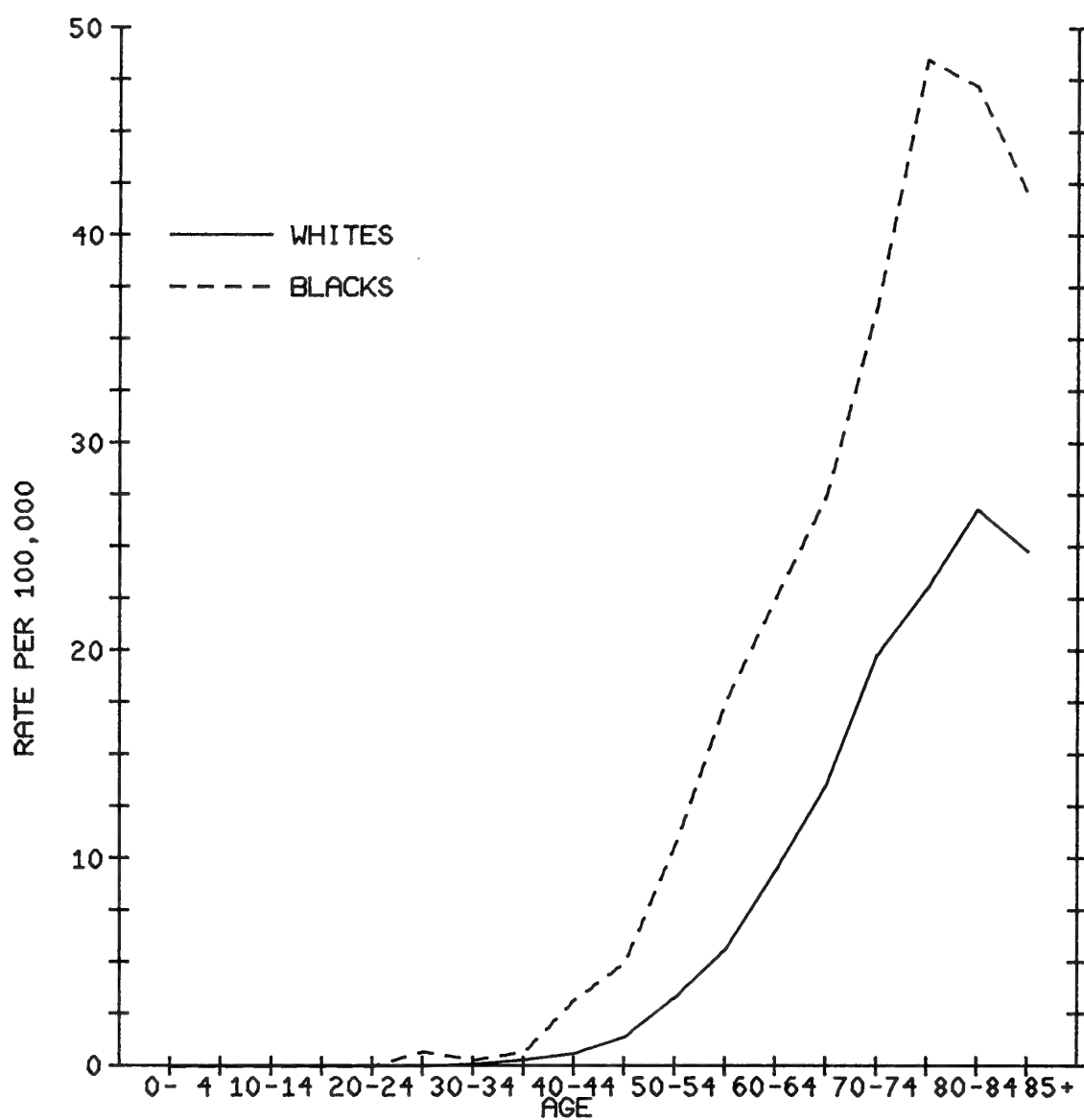




Figure II-21

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Ovary

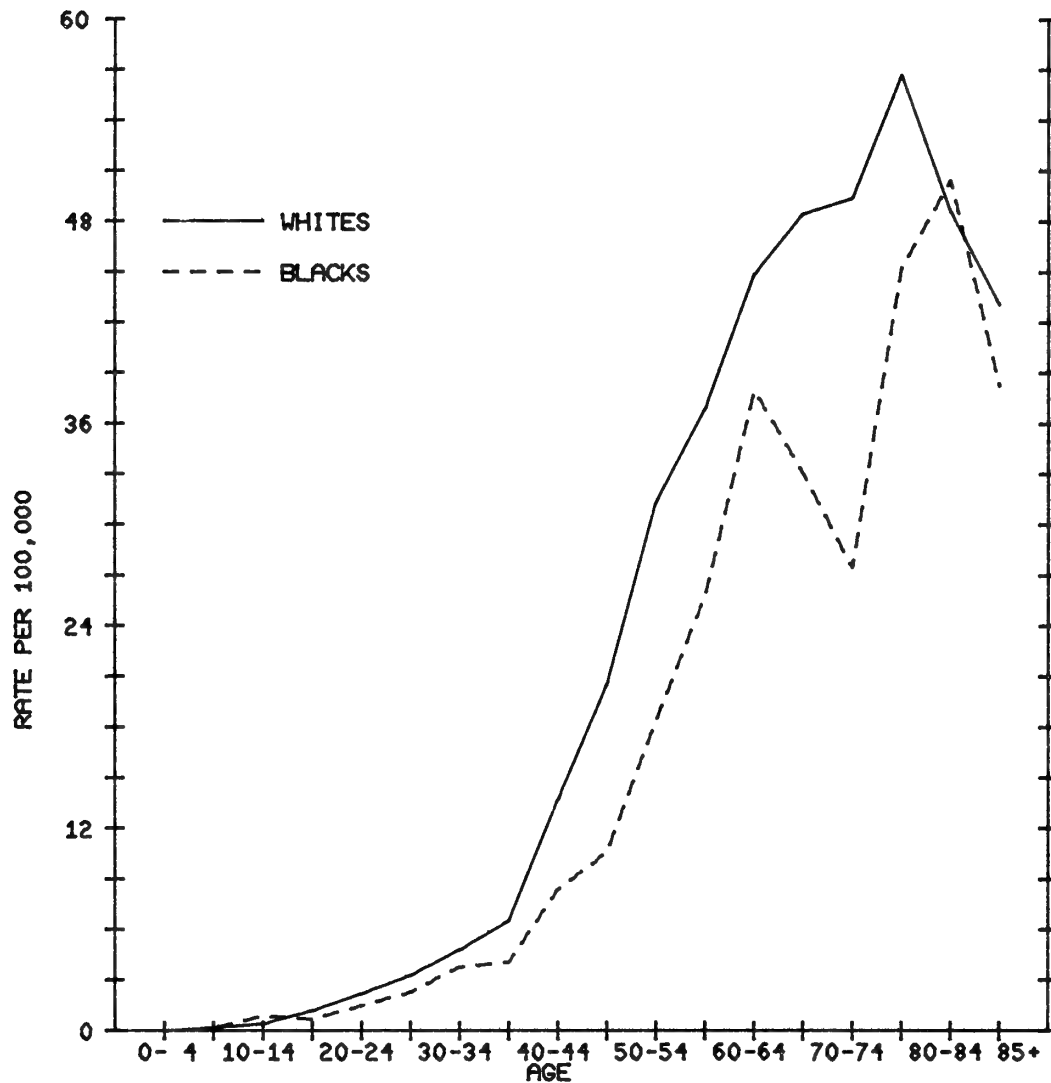


Figure II-22

# Age-adjusted Cancer Incidence Rates per 100,000 by Racial/Ethnic Group: 1978-81

## Pancreas Male

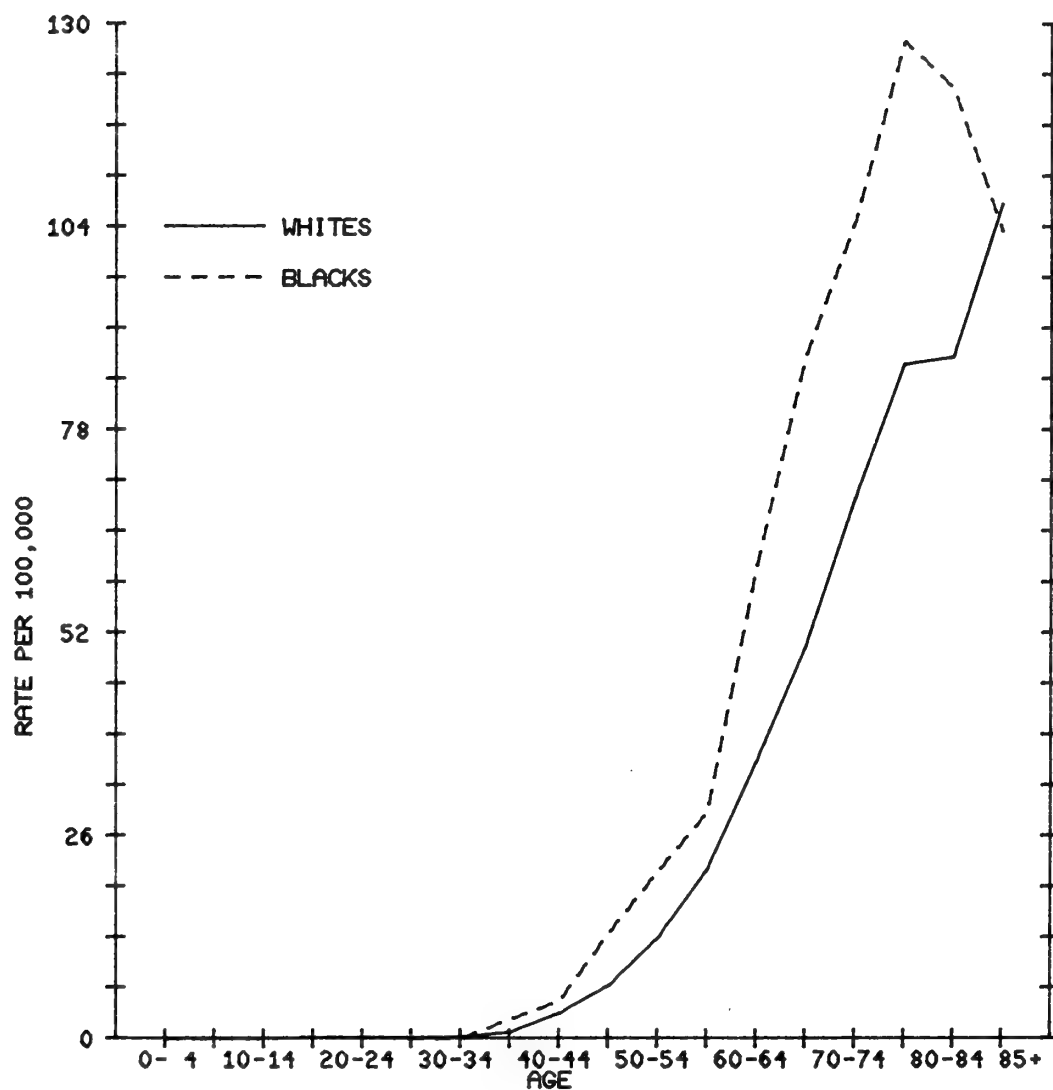




Figure II-23

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Pancreas Female

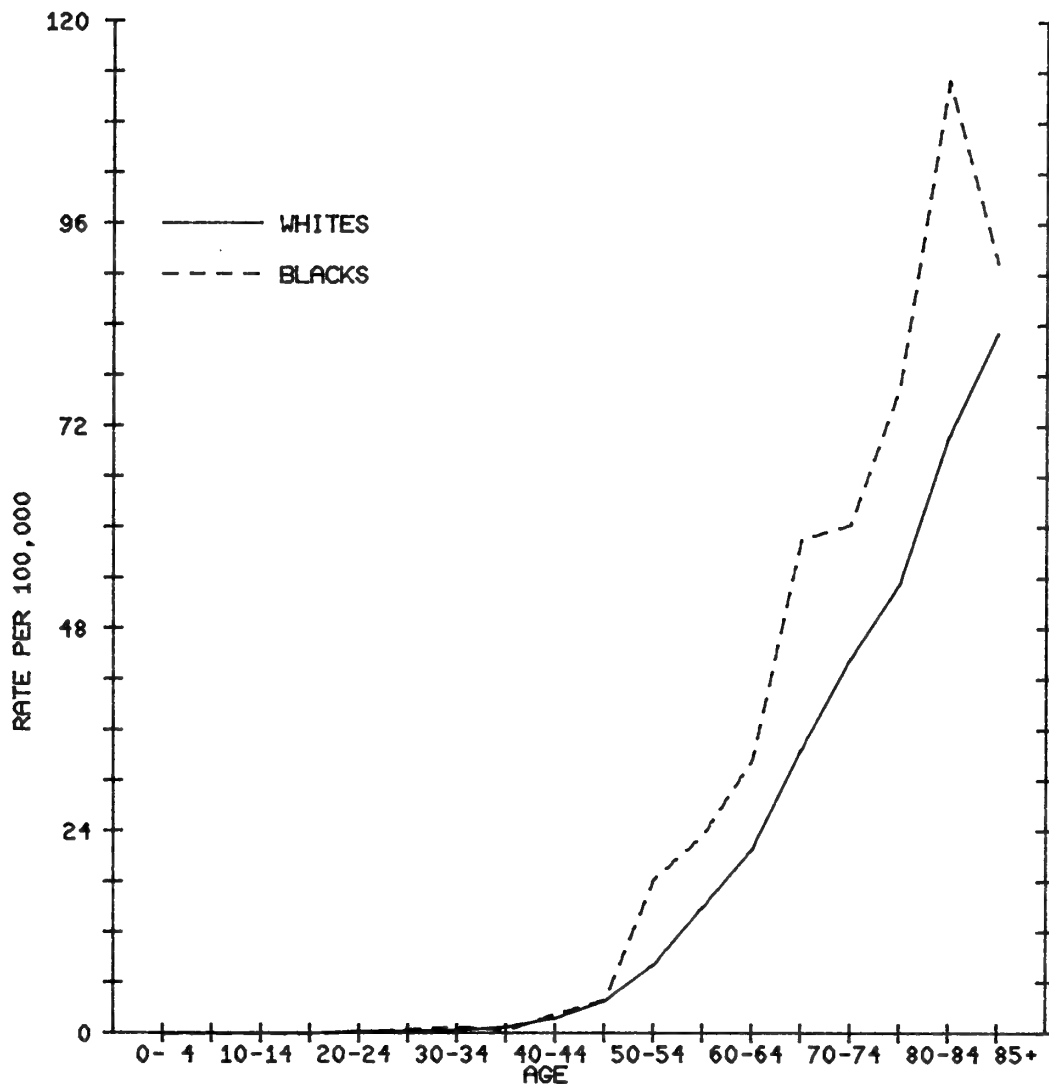




Figure II-24

# Age-specific Cancer Incidence Rates per 100,000 by Age for Blacks and Whites: 1978-81

## Prostate

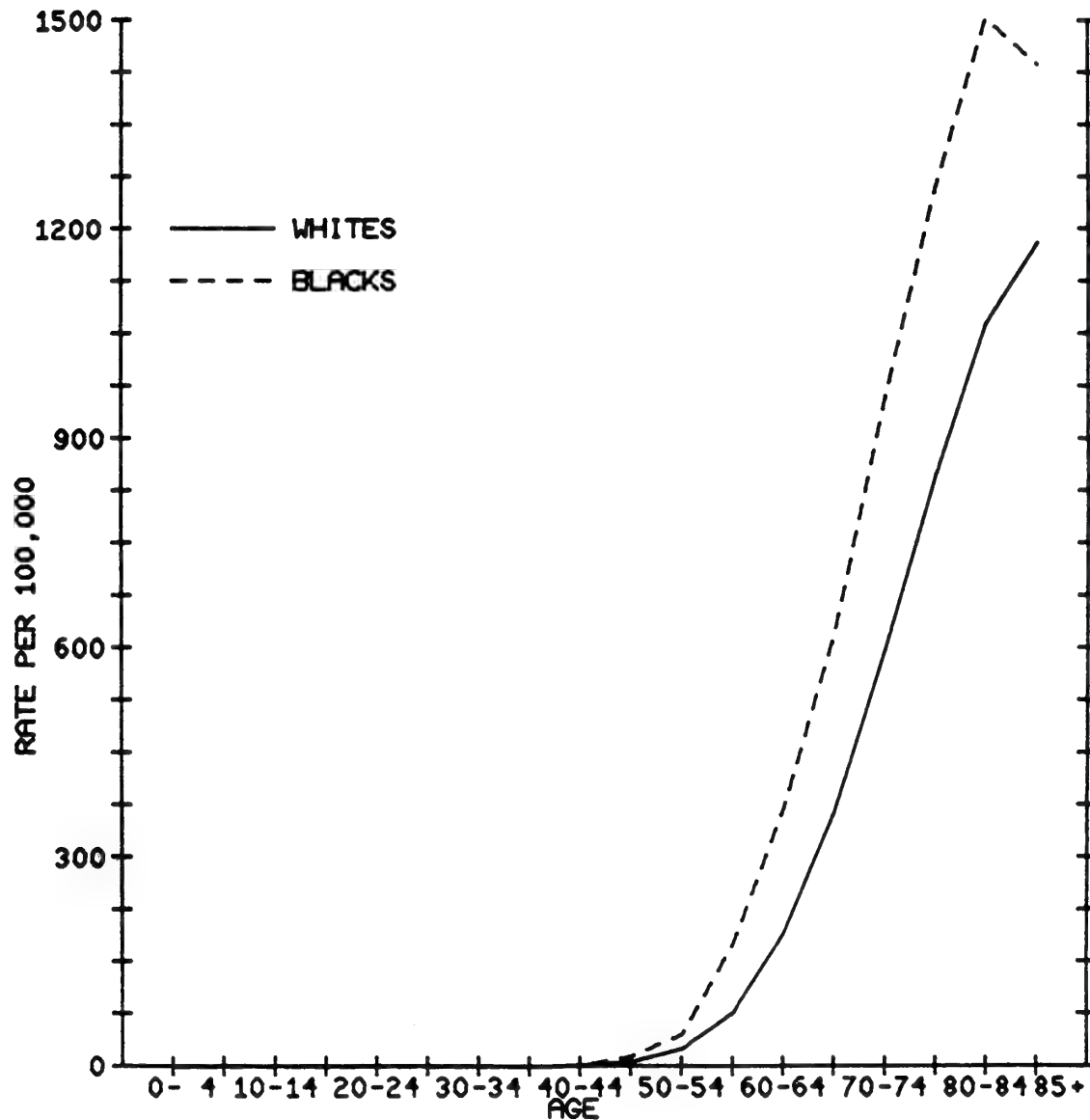


Figure II-25

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Rectum Male

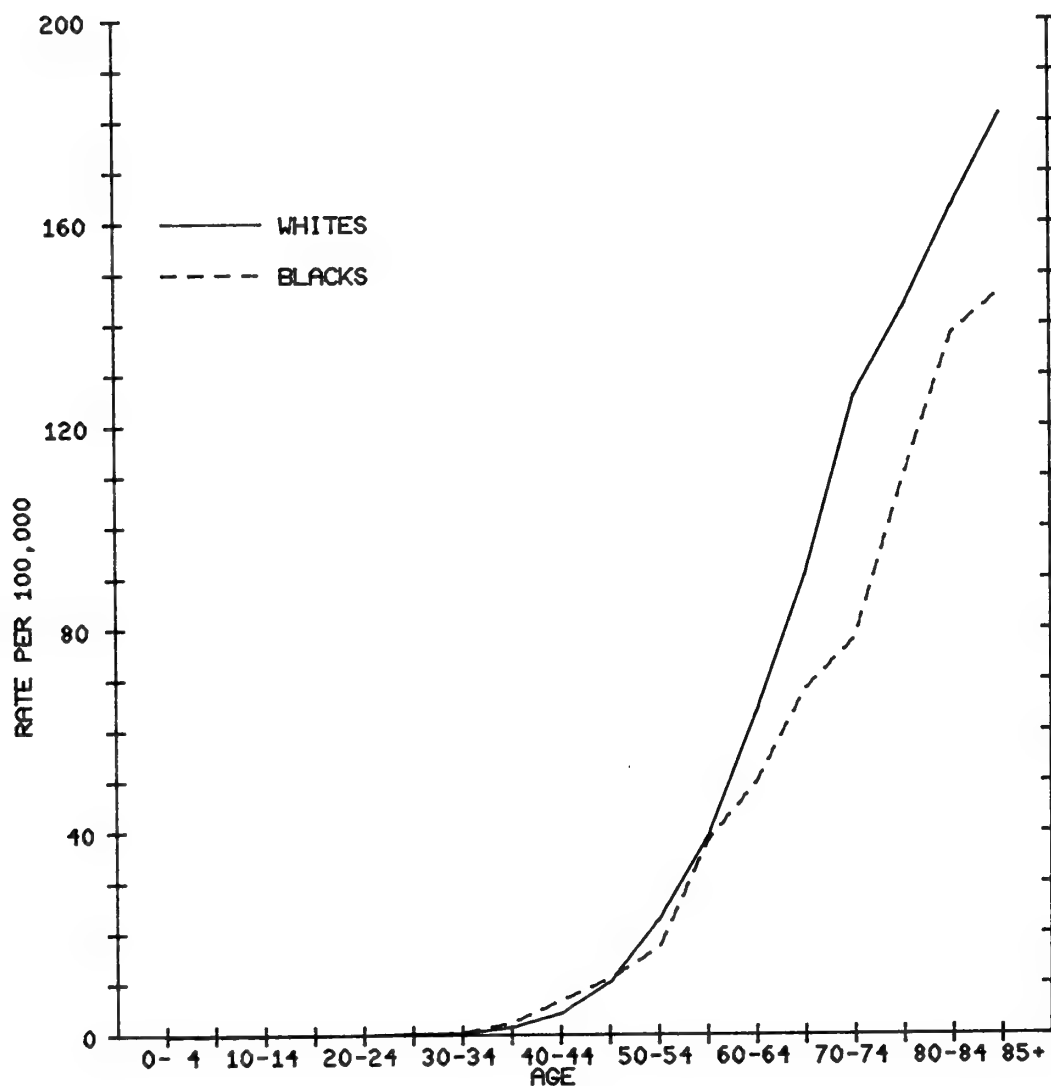


Figure II-26

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Rectum Female

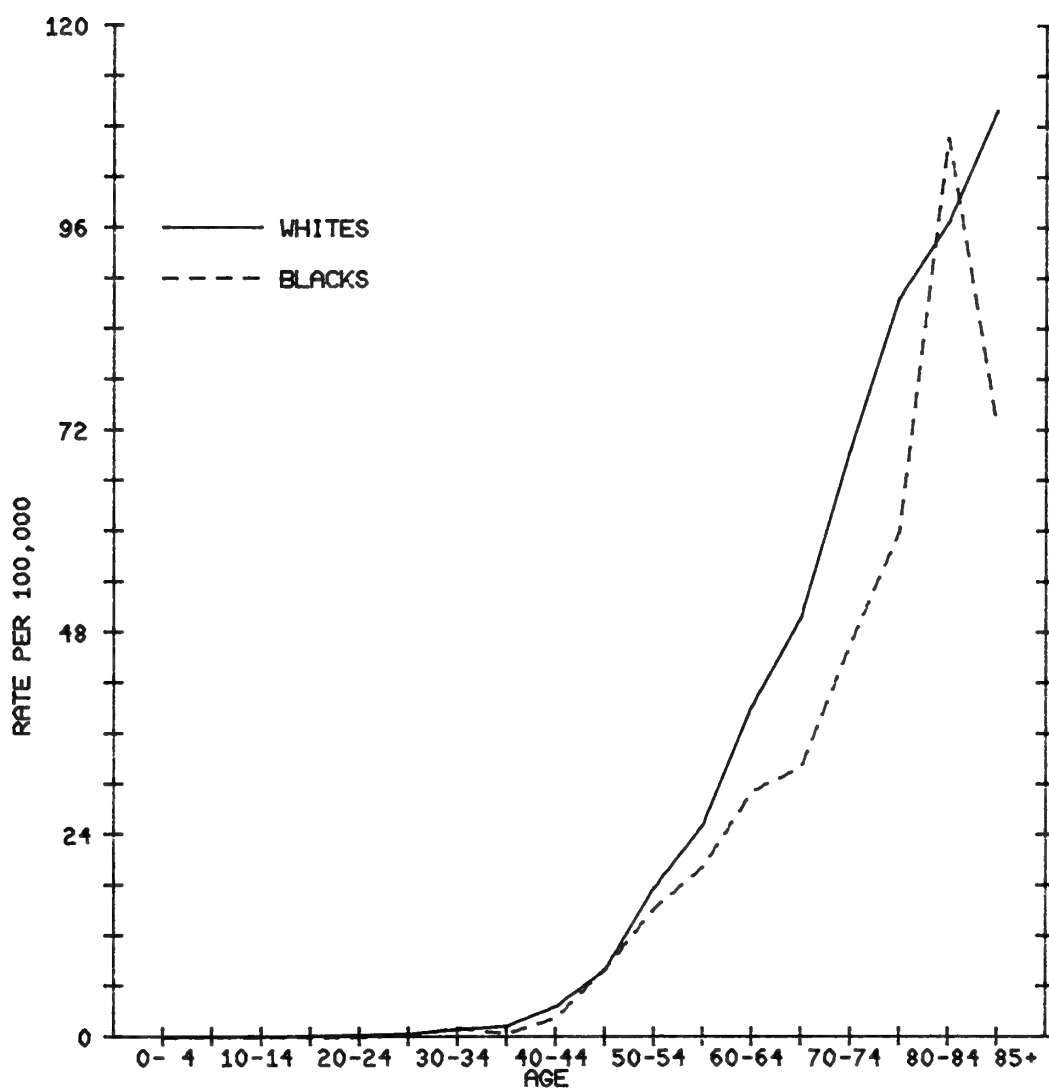


Figure II-27

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Stomach Male

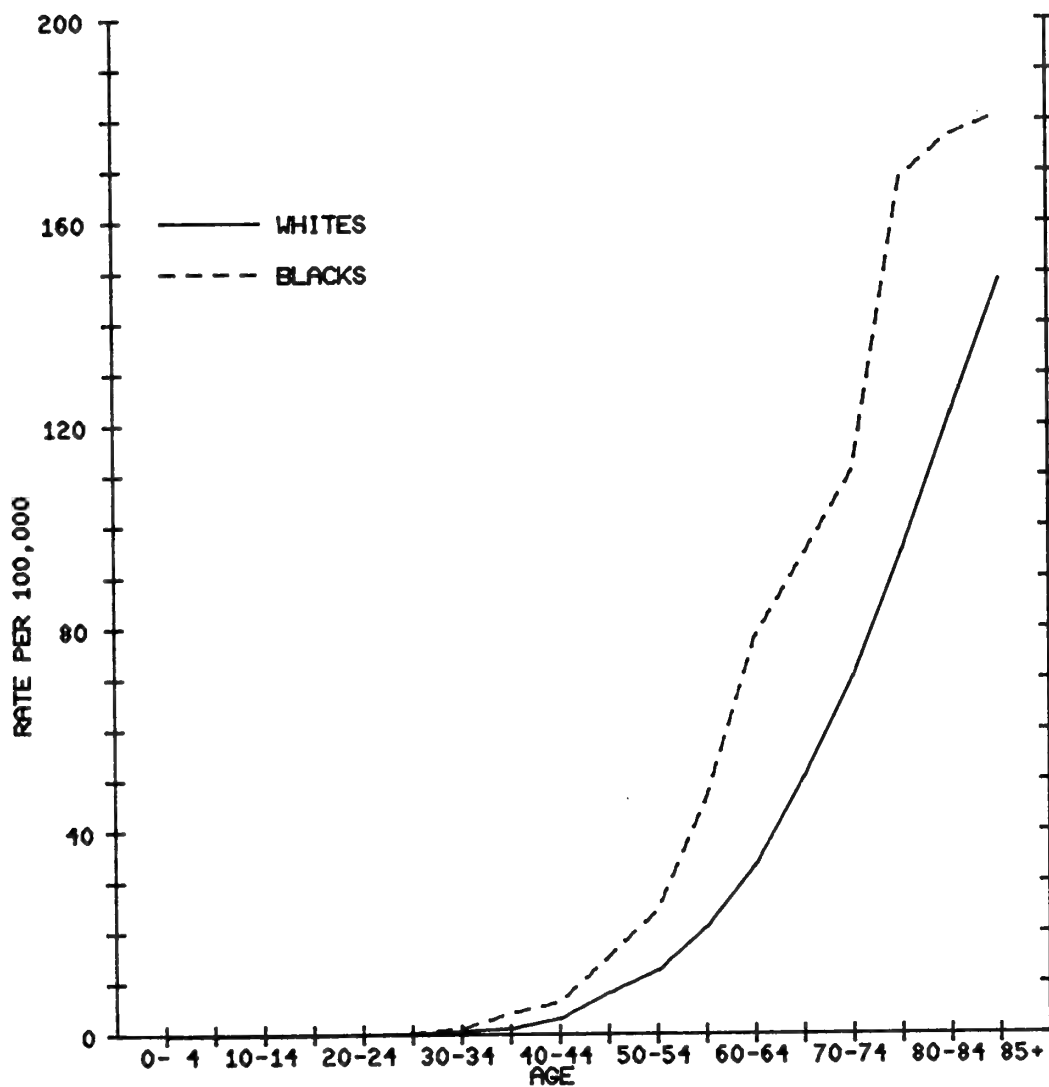


Figure II-28

# Age-specific Cancer Incidence Rates per 100,000 for Blacks and Whites: 1978-81

## Stomach Female

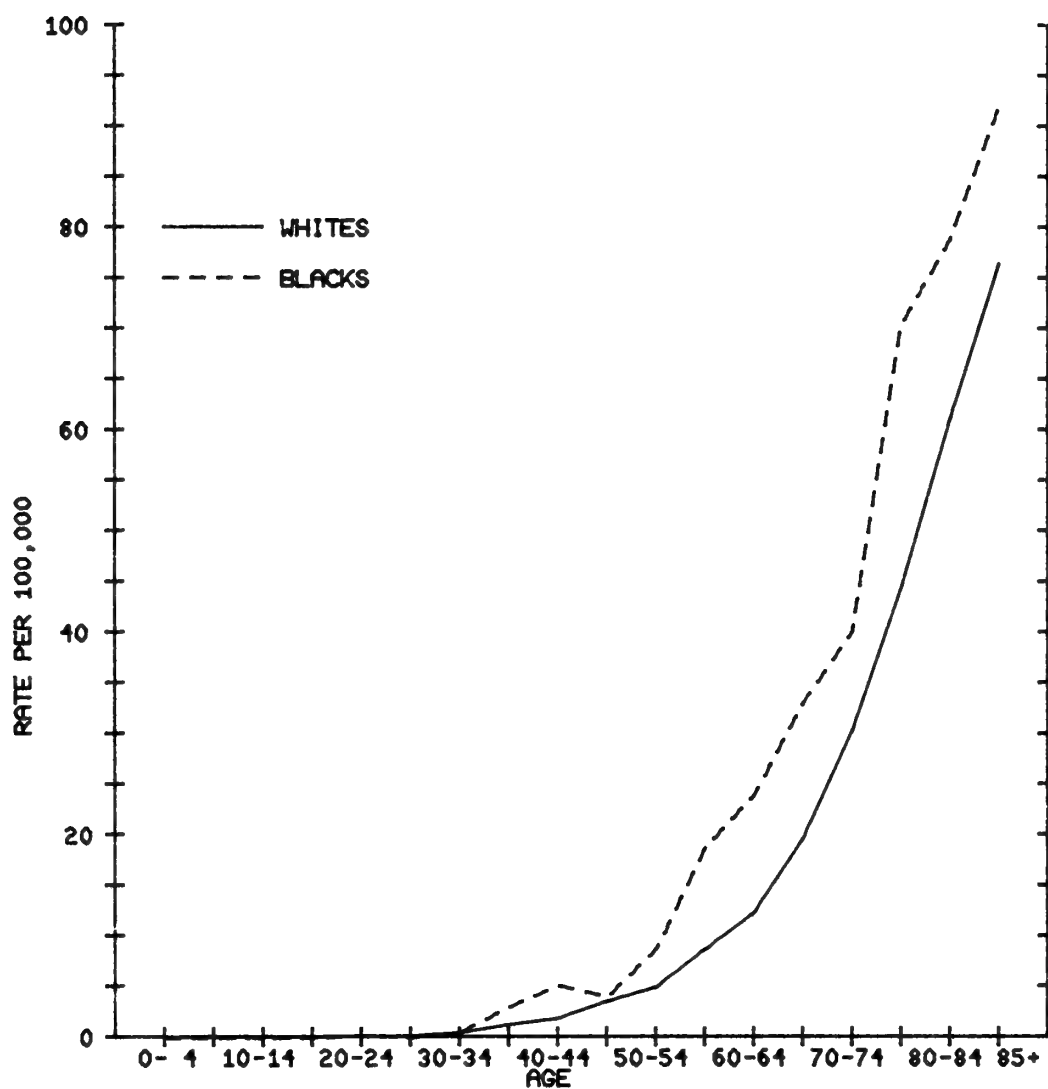


Figure II-29

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**All Sites Combined**

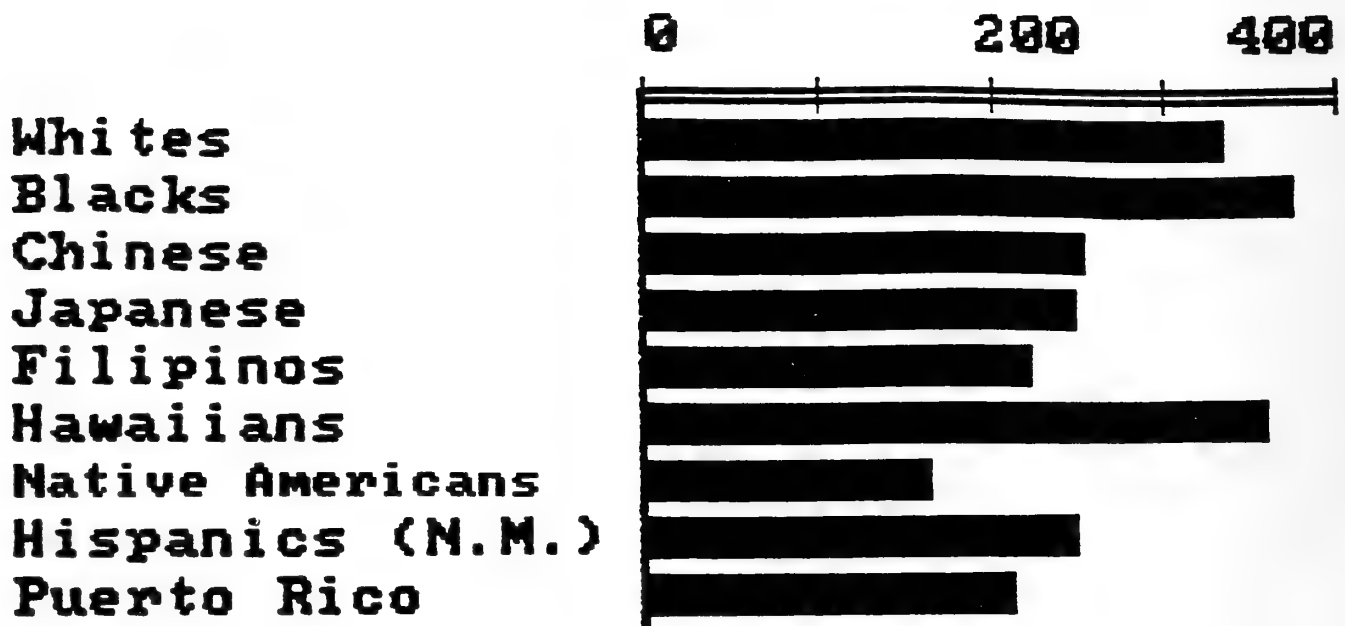




Figure II-30

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Bladder**

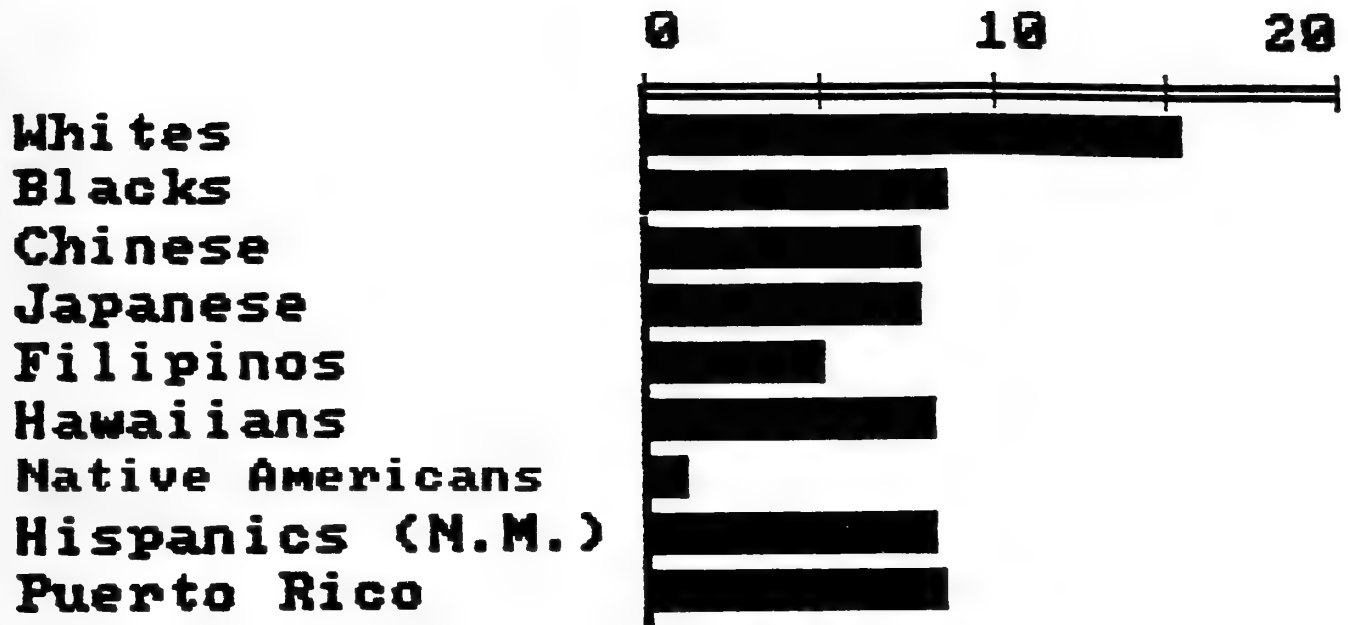


Figure II-31

Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81

Breast  
Female

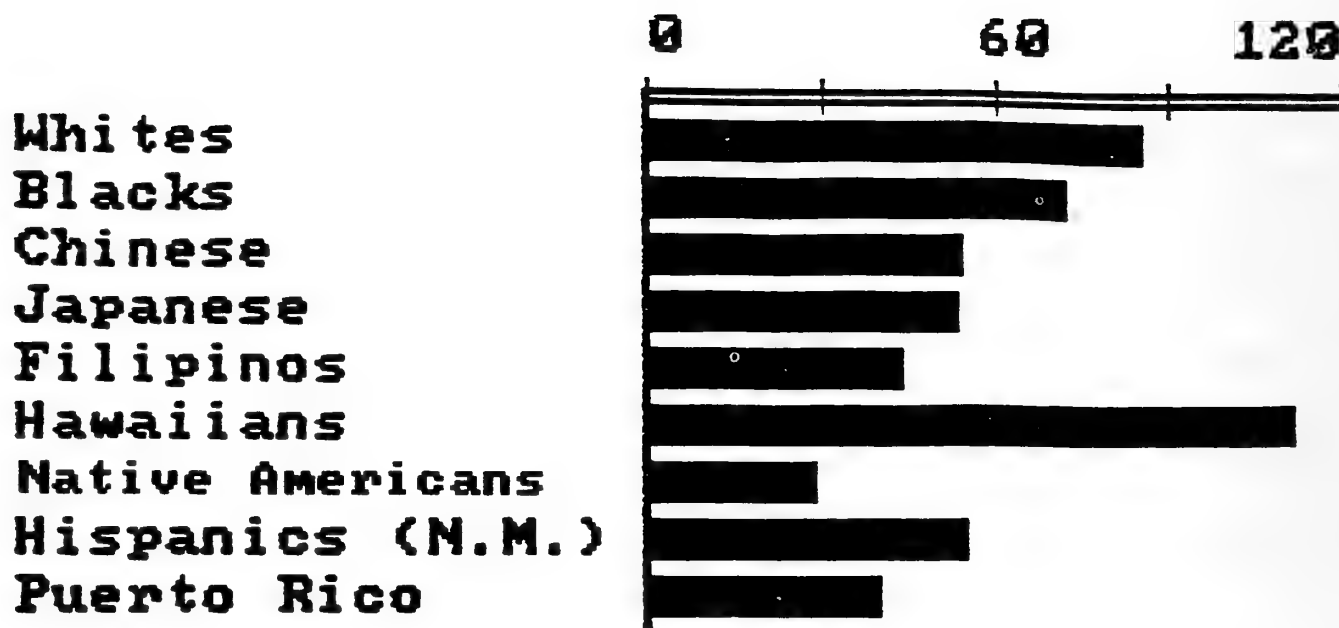


Figure II-32

Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81

Cervix Uteri

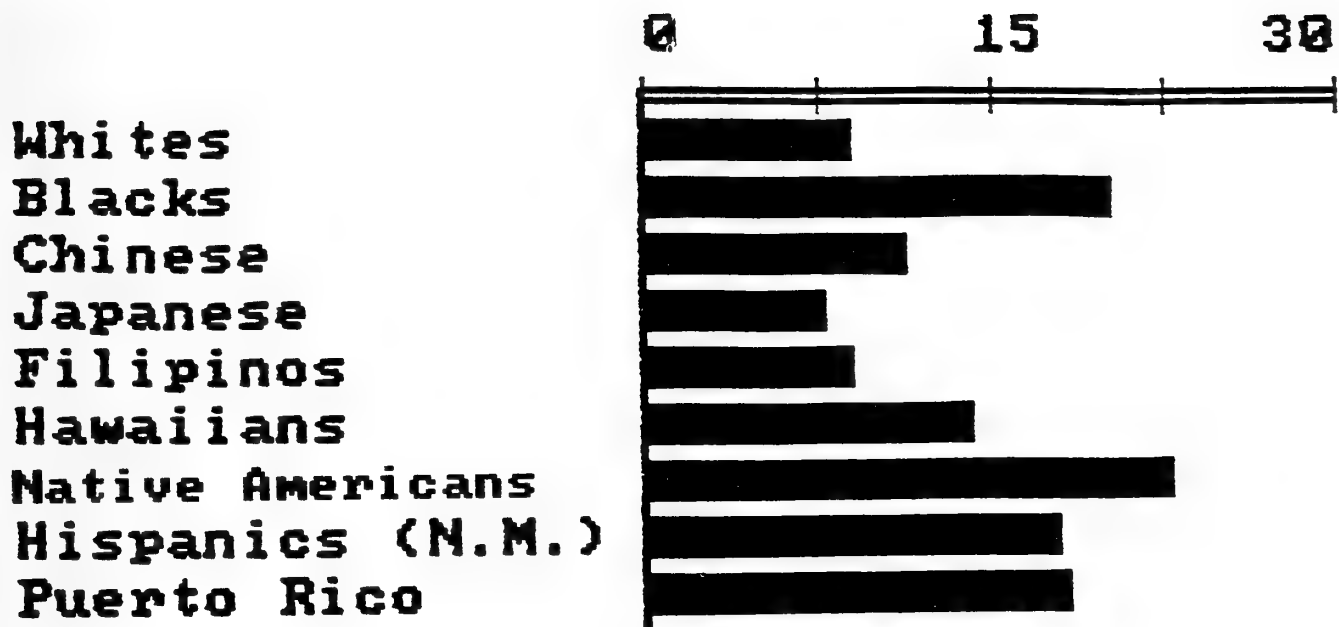


Figure II-33

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Colon**

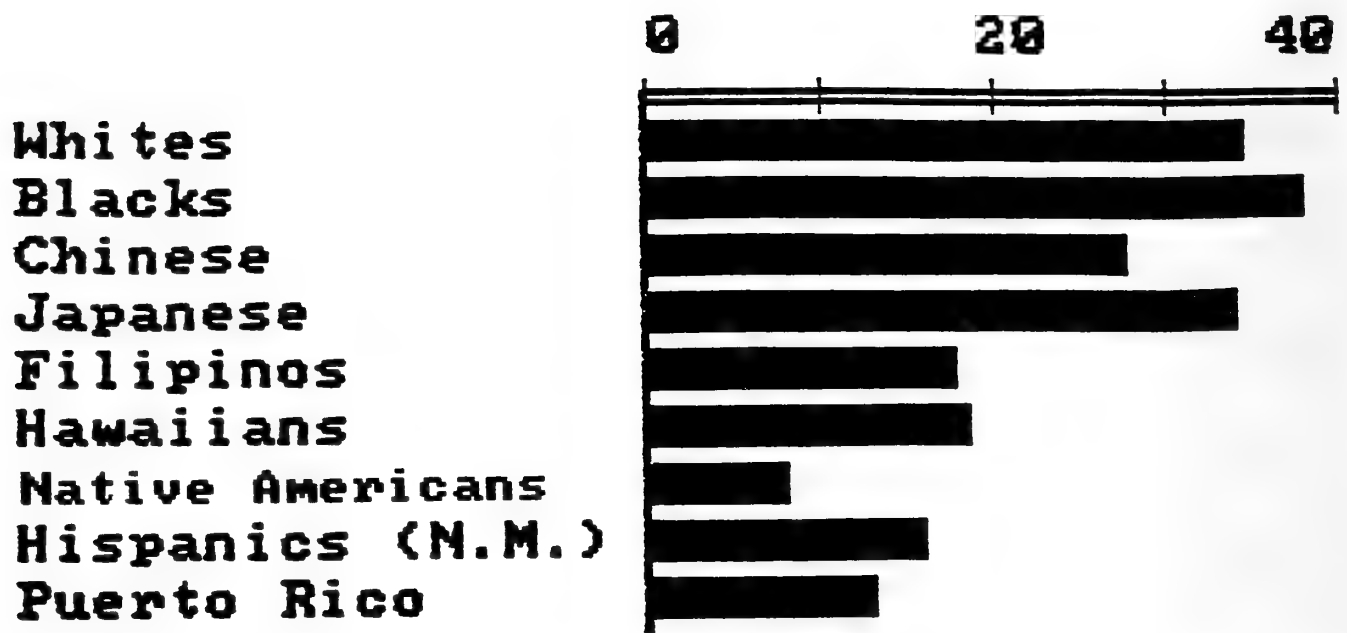


Figure II-34

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Colon and Rectum**

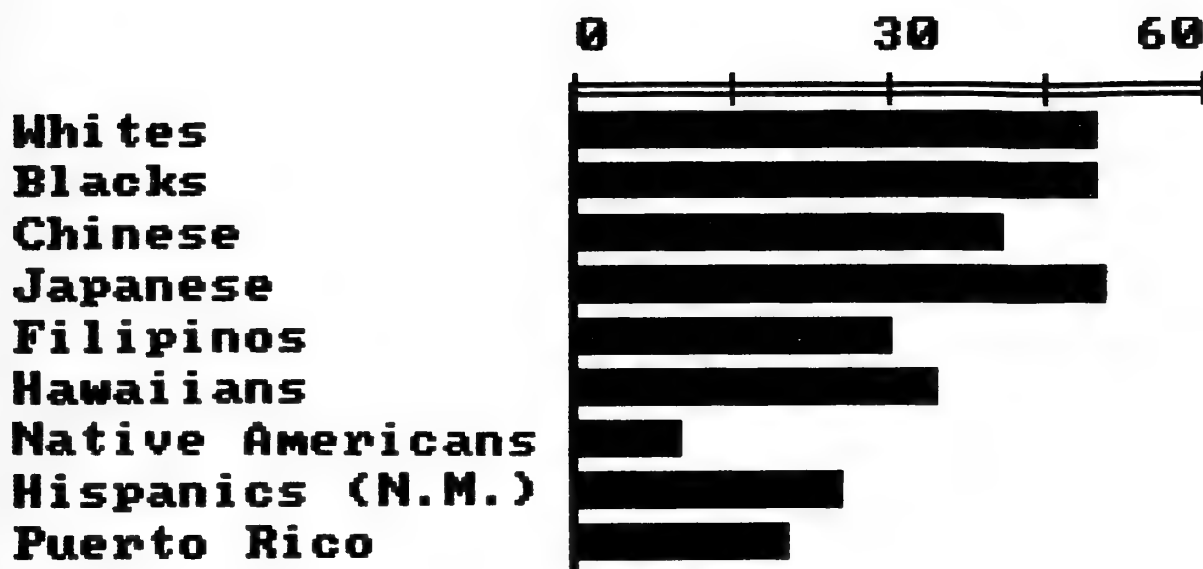


Figure II-35

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Corpus Uteri**

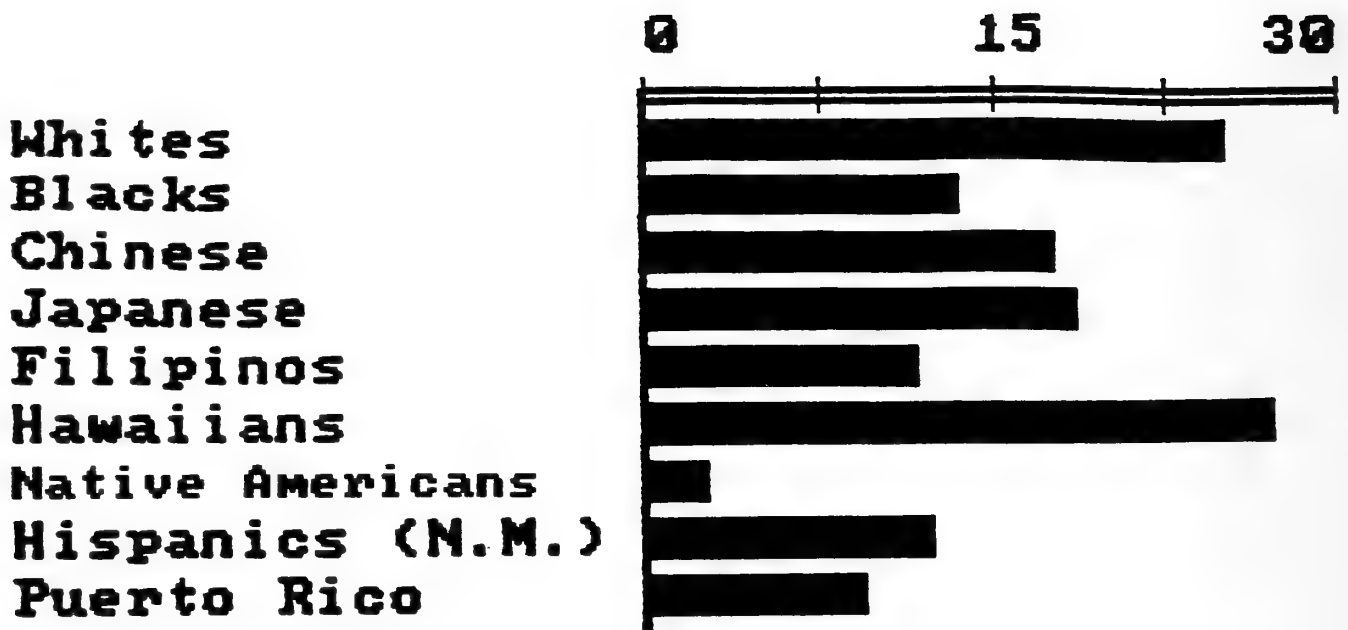


Figure II-36

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Esophagus**

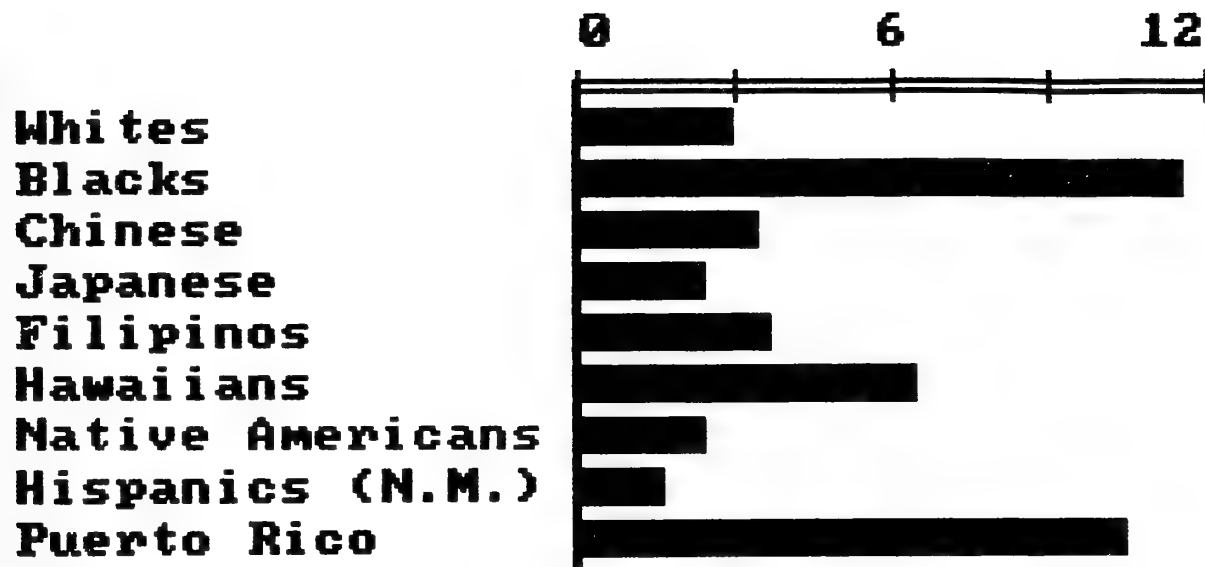


Figure II-37

Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81

Larynx

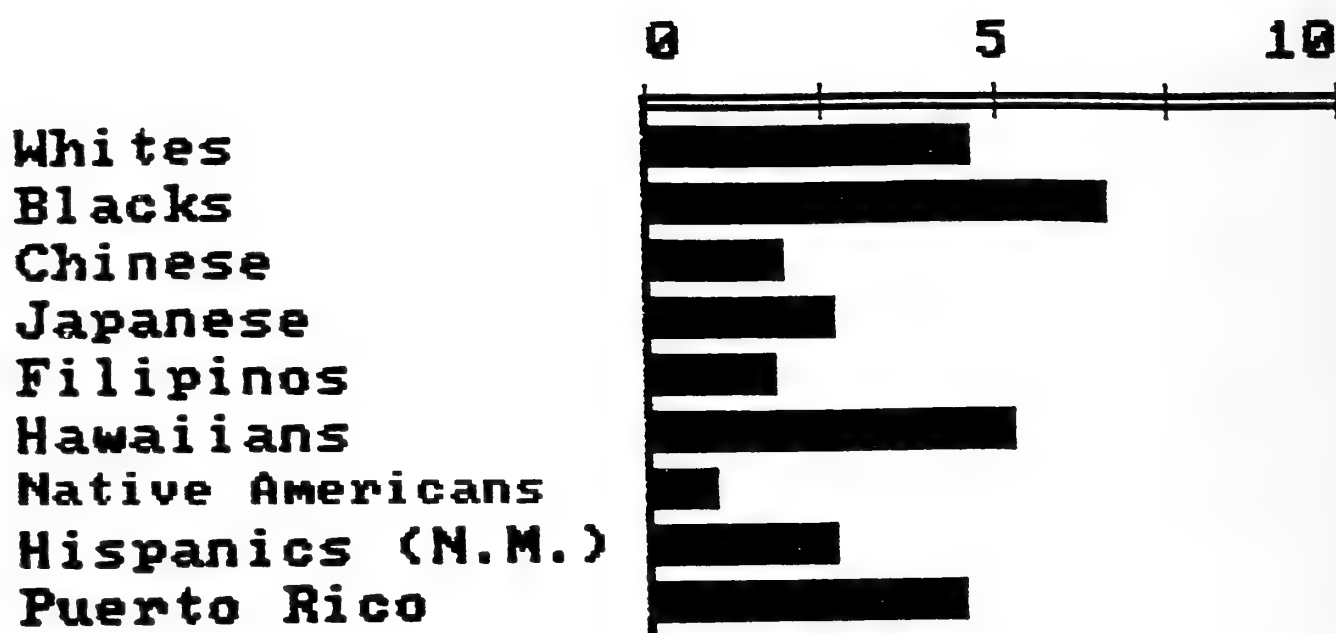




Figure II-38

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Lung**

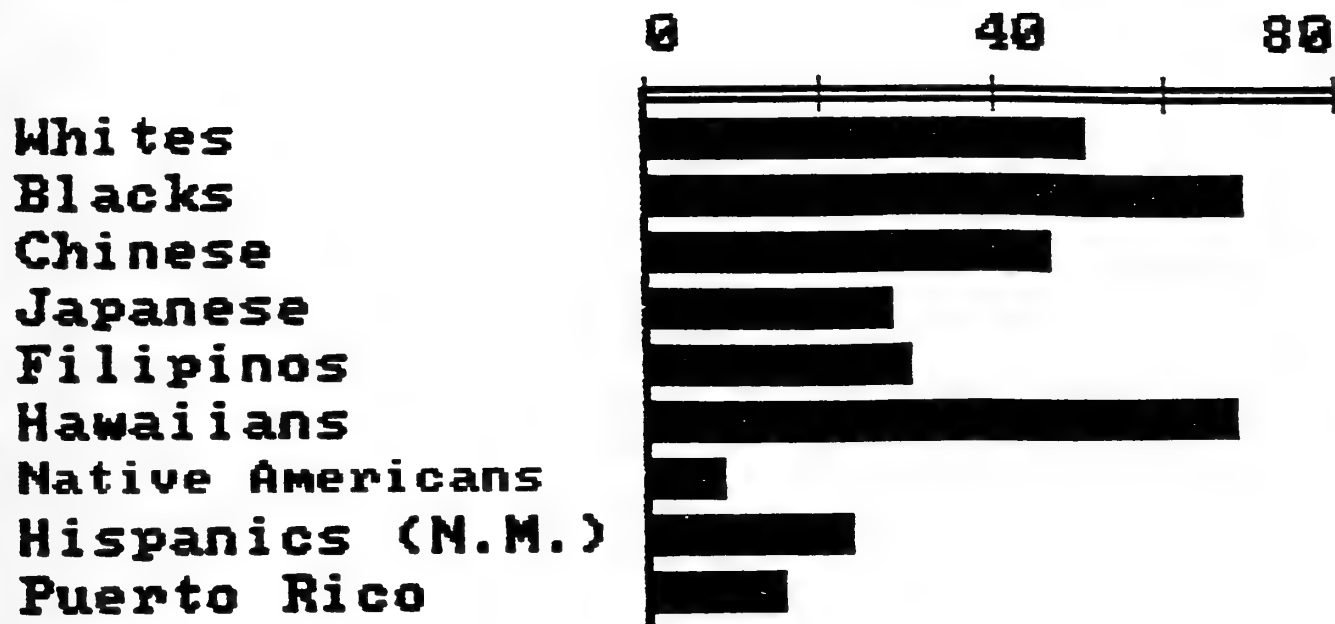


Figure II-39

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Multiple Myeloma**

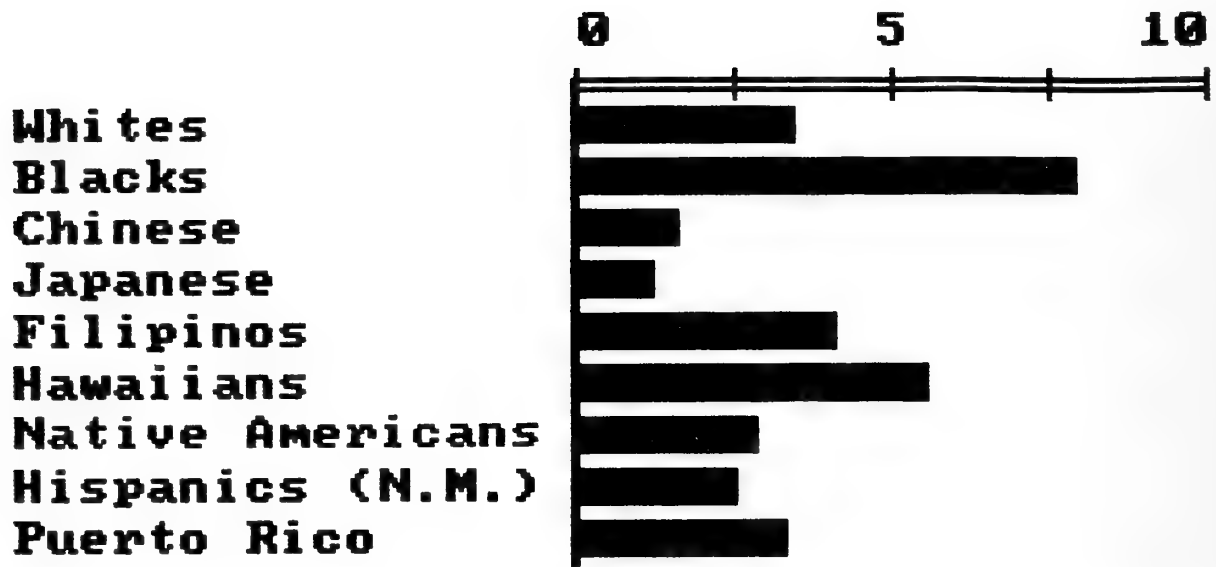


Figure II-40

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Ovary**

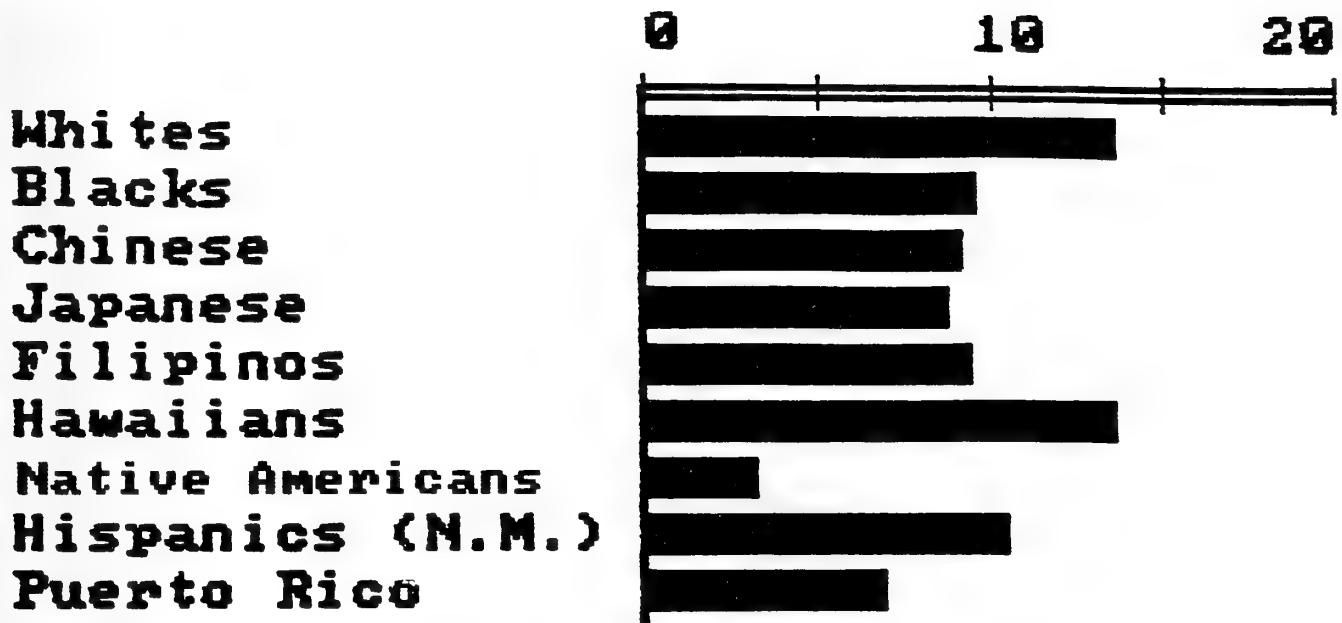


Figure II-41

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Pancreas**

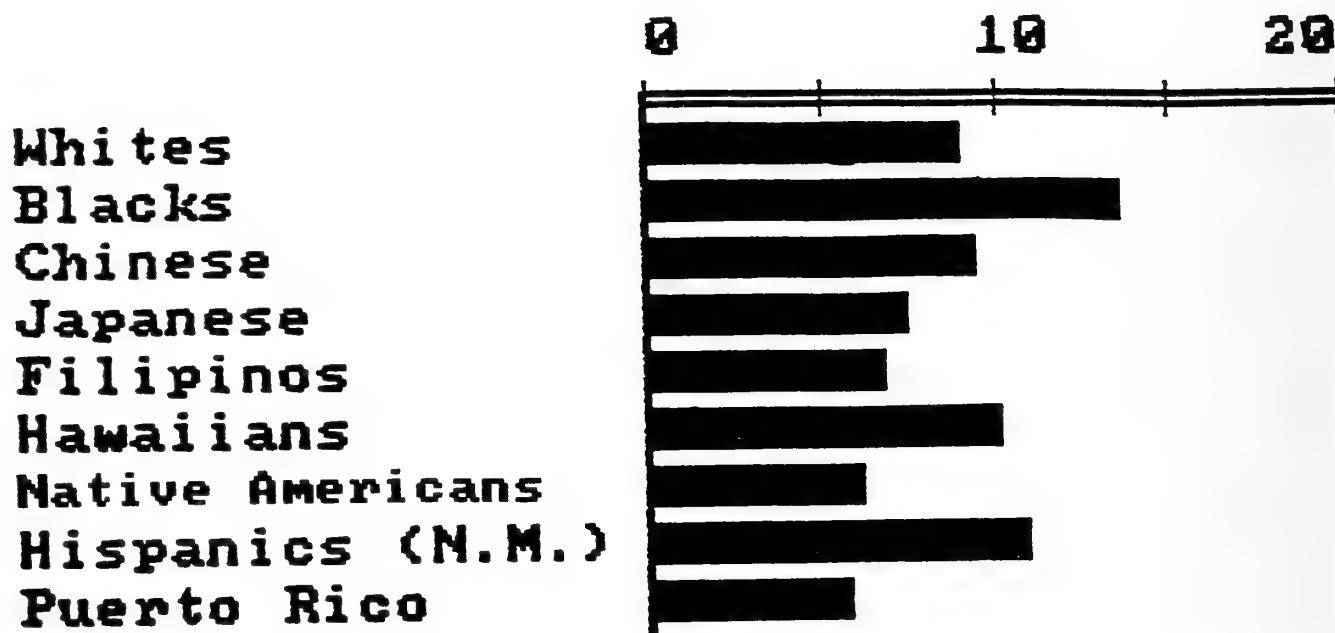


Figure II-42

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Prostate**

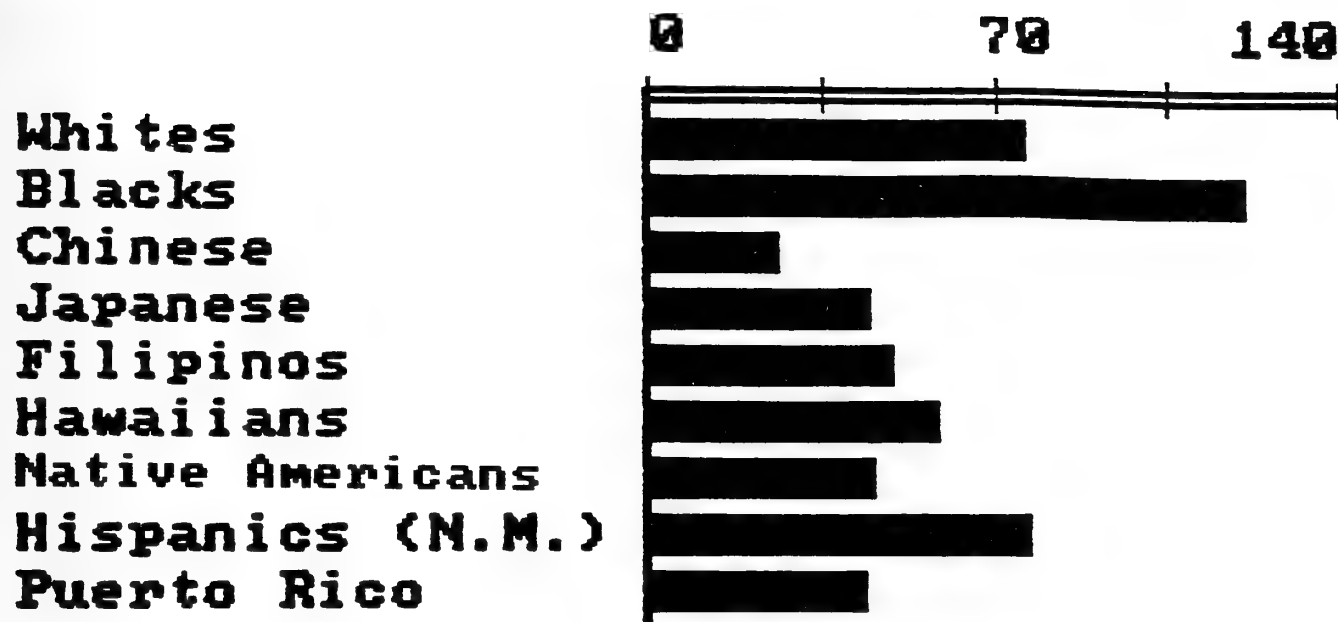


Figure II-43

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Rectum**

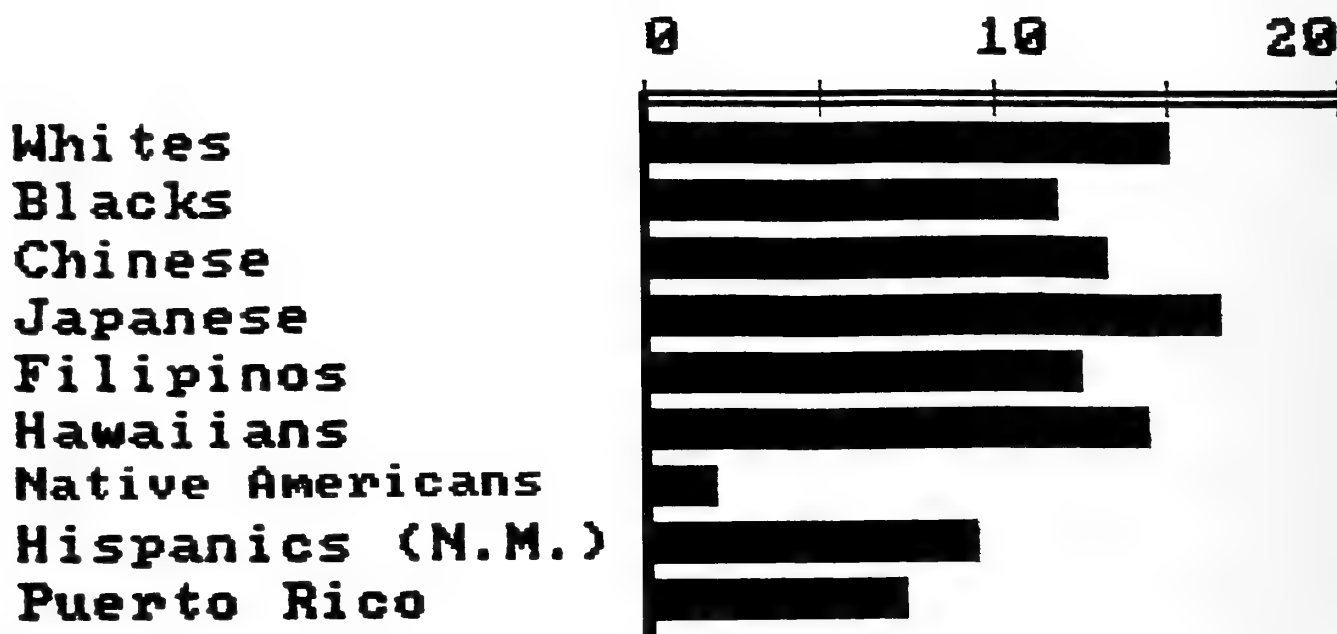
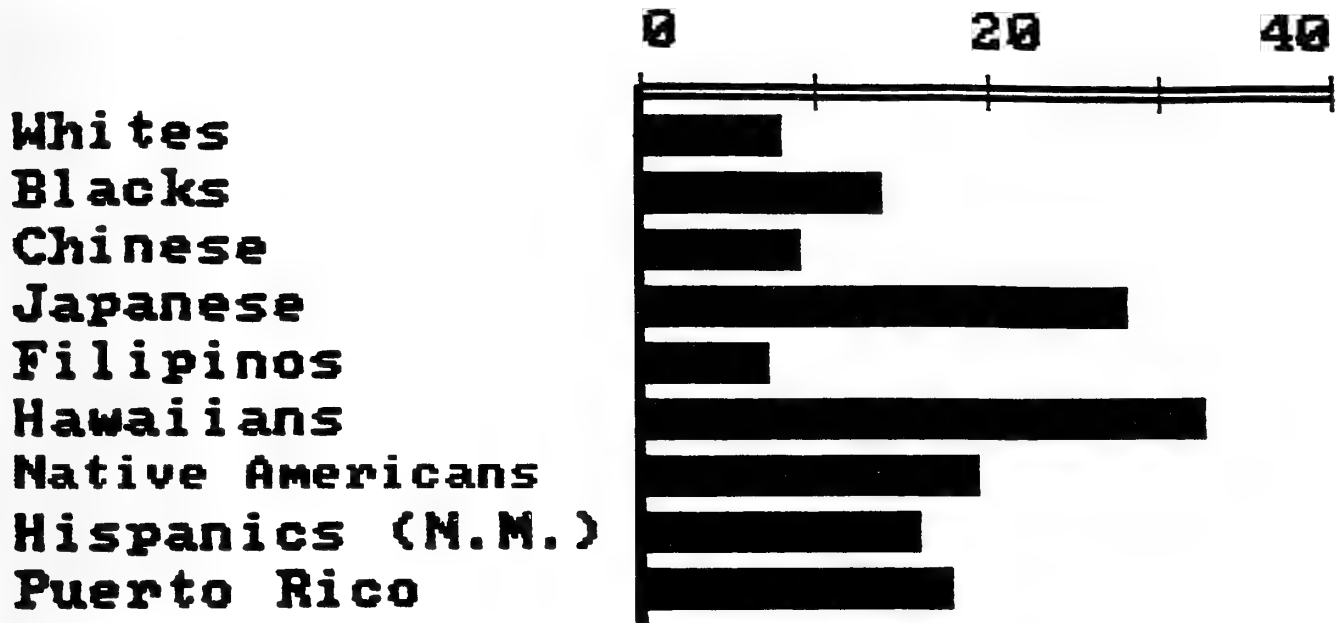


Figure II-44

**Age-adjusted Cancer Incidence Rates per 100,000  
by Racial/Ethnic Group: 1978-81**

**Stomach**

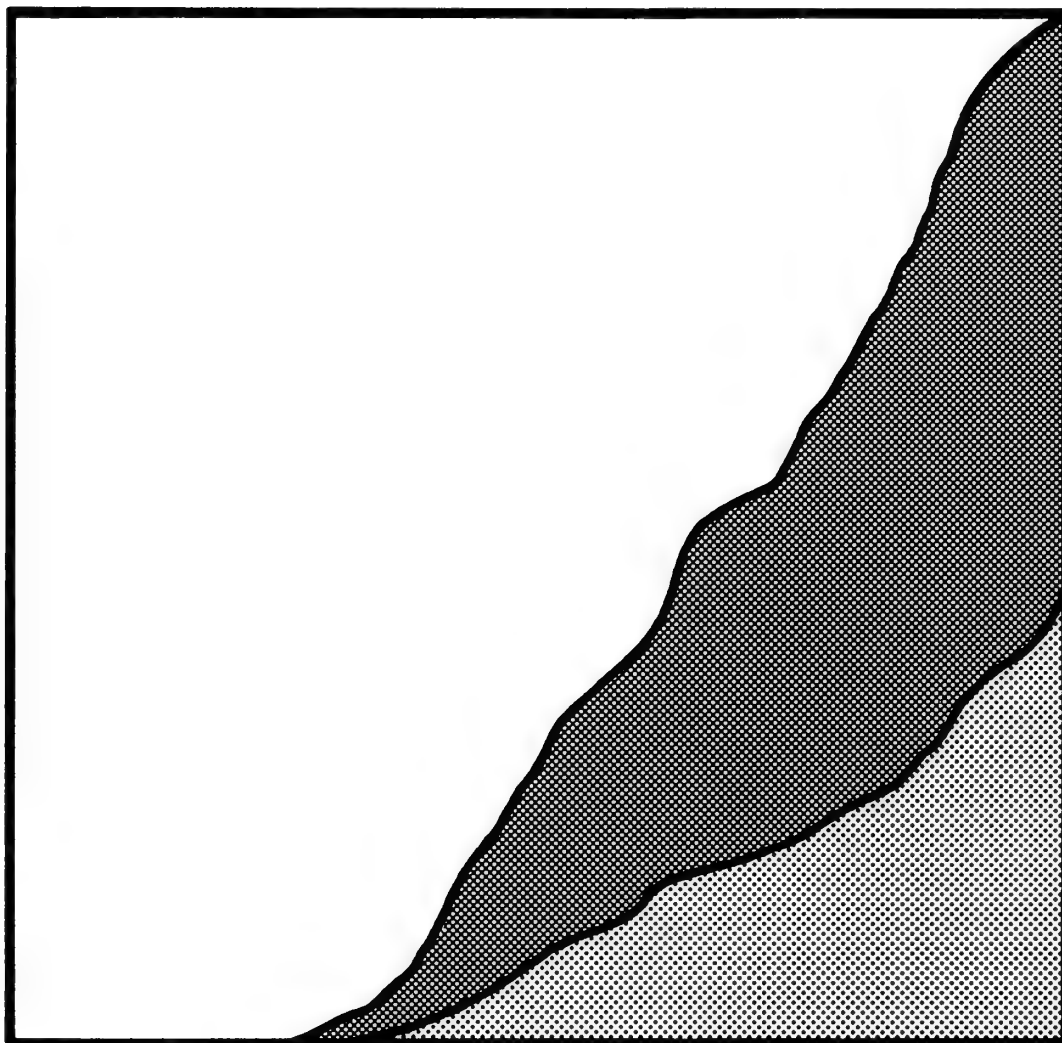






# **Section III.**

## **Cancer Mortality For Blacks, Whites, And Other Groups**





# TABLE OF CONTENTS

## SECTION III. CANCER MORTALITY FOR BLACKS, WHITES, AND OTHER GROUPS

	Page
Discussion .....	89
Table III-1.                      Average Annual Age-adjusted Cancer Mortality Rates per 100,000 by Primary Site and Racial/Ethnic Group, Total United States, 1978-81	
<i>Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81</i>	
Figure III-1.                      All Sites Combined .....	91
Figure III-2.                      All Sites Combined, Male .....	92
Figure III-3.                      All Sites Combined, Female .....	93
Figure III-4.                      Bladder, Male .....	94
Figure III-5.                      Bladder, Female .....	95
Figure III-6.                      Breast, Female .....	96
Figure III-7.                      Cervix Uteri . . . . .	97
Figure III-8.                      Colon, Male .....	98
Figure III-9.                      Colon, Female .....	99
Figure III-10.                      Colon and Rectum, Male .....	100
Figure III-11.                      Colon and Rectum, Female .....	101
Figure III-12.                      Corpus Uteri .....	103
Figure III-13.                      Esophagus, Male .....	104
Figure III-14.                      Esophagus, Female .....	105
Figure III-15.                      Larynx, Male .....	106
Figure III-16.                      Larynx, Female .....	107
Figure III-17.                      Lung, Male .....	108
Figure III-18.                      Lung, Female .....	109
Figure III-19.                      Multiple Myeloma, Male .....	110
Figure III-20.                      Multiple Myeloma, Female .....	111
Figure III-21.                      Ovary .....	113
Figure III-22.                      Pancreas, Male .....	114
Figure III-23.                      Pancreas, Female .....	115
Figure III-24.                      Prostate .....	117
Figure III-25.                      Rectum, Male .....	118
Figure III-26.                      Rectum, Female .....	119
Figure III-27.                      Stomach, Male .....	120
Figure III-28.                      Stomach, Female .....	121



# **Section III: Cancer Mortality for Blacks, Whites, and Other Groups**

## **Discussion**

The mortality data presented in this section are collected by the National Center for Health Statistics. The mortality rates are an average of four annual cancer mortality rates: 1978, 1979, 1980, and 1981 (comparable to the incidence data presented in Section II).

The first table presents average annual, age-adjusted cancer mortality rates for all sites combined and for selected cancer sites for blacks, whites, and other racial/ethnic groups. This is followed by a series of line graphs showing age-specific mortality rates for blacks and whites for selected cancer sites.

### **Highlights**

- Among the major racial/ethnic groups, blacks had the highest overall age-adjusted mortality rate for cancer, followed by Native Hawaiians and then whites.
- Blacks had the highest mortality rates for cancers of the female breast (for women under age 40), colon, colon and rectum combined, cervix uteri, corpus uteri, esophagus, larynx, lung (male), multiple myeloma, pancreas, and prostate.
- Native Hawaiians had the highest mortality rates for cancers of the female breast (all ages combined, and for women age 40 and above), lung (female), and stomach.
- Whites had the highest mortality rates for cancers of the bladder and ovary.
- Chinese-Americans had the highest mortality rate for cancer of the rectum.
- Blacks had mortality rates that were over three times the rate of whites for cancer of the esophagus, and more than twice the rate for cancers of the cervix uteri, multiple myeloma, and prostate.
- Blacks experienced higher age-specific mortality rates for all sites combined than whites after ages 30-40.
- Mortality rates for colon and rectal cancer for black males and females suggest that the excess rate experienced by blacks is mainly present in black females.

**Table III-1**

**Average Annual Age-adjusted  
Cancer Mortality Rates per 100,000  
by Primary Site and Racial/Ethnic Group,  
Total United States, 1978-81**

Primary Site	Whites*	Blacks	Japanese	Chinese	Filipinos	Native Hawaiians	Native Americans
All sites	163.6	208.5	104.2	131.5	69.7	200.5	87.4
Bladder	3.9	3.8	1.8	1.7	1.5	1.6	1.0
Breast, Female	26.6	26.3	9.9	13.0	8.0	33.0	8.2
Ages <40	1.6	2.5	1.1	0.8	0.9	1.2	1.1
Ages 40+	70.2	68.1	25.2	34.6	20.6	88.7	20.6
Cervix Uteri	3.2	8.8	2.7	2.9	1.6	4.2	5.8
Colon & Rectum	21.6	22.3	17.2	19.3	8.1	15.0	8.6
Colon	18.1	18.8	13.6	15.5	5.8	11.4	6.8
Rectum	3.5	3.5	3.6	3.8	2.3	3.6	1.8
Corpus Uteri	3.9	6.6	3.9	4.3	2.0	3.0	1.8
Esophagus	2.6	9.2	1.9	3.3	1.9	6.5	2.1
Larynx	1.3	2.5	0.2	0.7	0.4	1.4	0.9
Lung, Male	69.3	91.4	32.7	48.2	20.0	88.0	28.0
Lung, Female	20.2	20.1	8.6	21.2	6.8	31.5	8.6
Multiple Myeloma	2.4	5.0	1.2	1.2	1.2	2.8	1.9
Ovary	8.1	6.4	4.3	4.2	2.8	7.0	3.3
Pancreas	8.4	11.0	7.0	7.4	3.3	10.9	4.5
Prostate	21.0	43.9	8.8	7.5	8.2	11.6	15.5
Stomach	5.3	10.0	17.5	7.8	3.3	25.3	6.2

\* The National Center for Health Statistics from which these data are derived  
does not code ethnicity for Hispanics.

Figure III-1

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## All Sites Combined

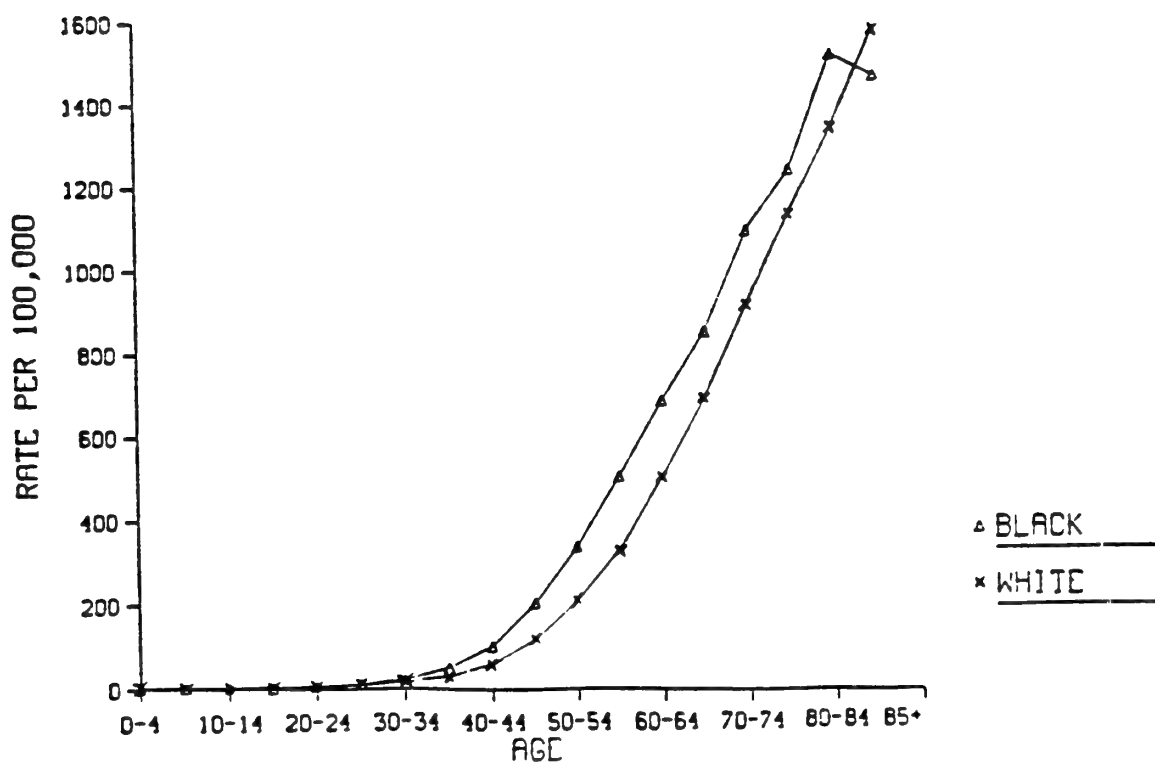


Figure III-2

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## All Sites Combined Male

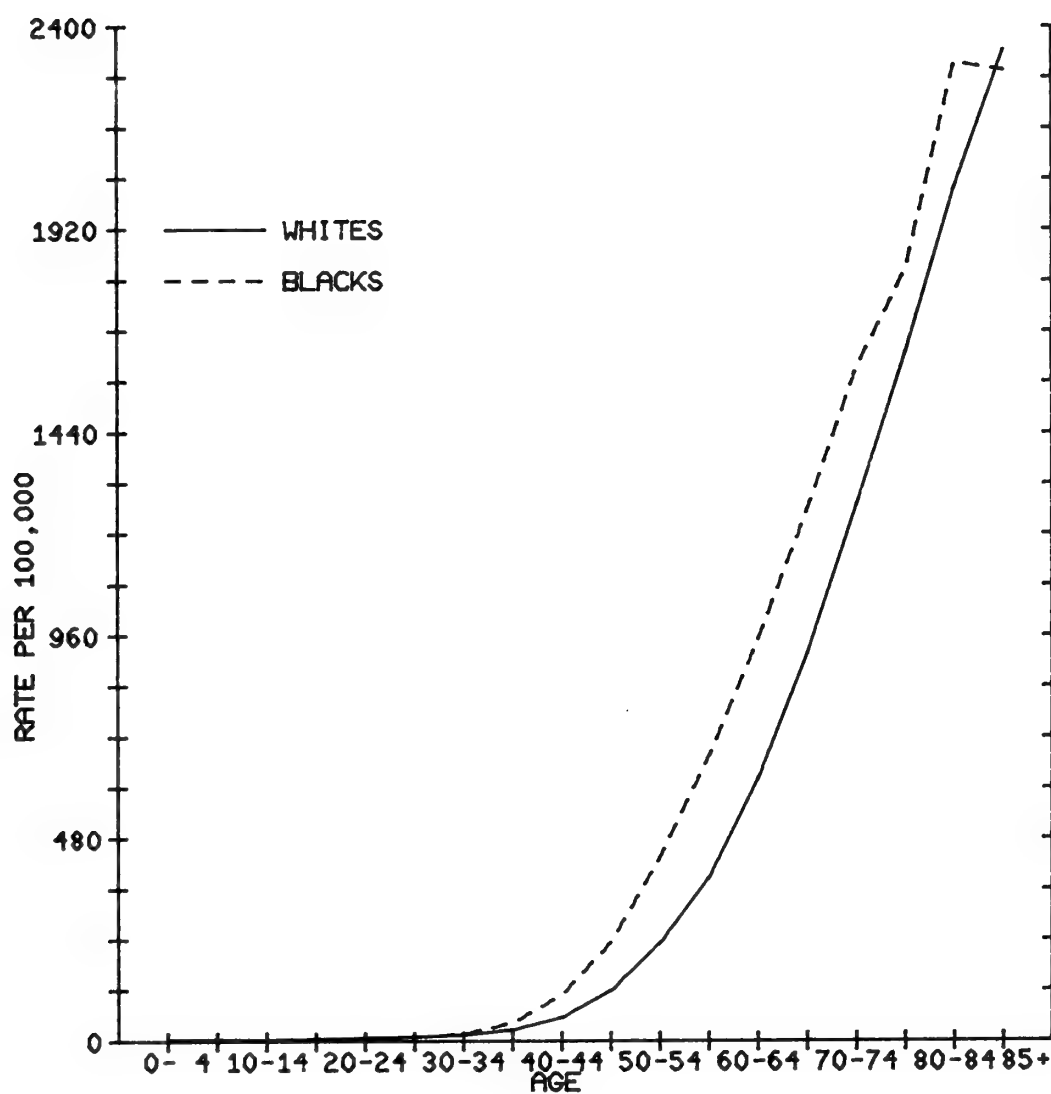




Figure III-3

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## All Sites Combined Female

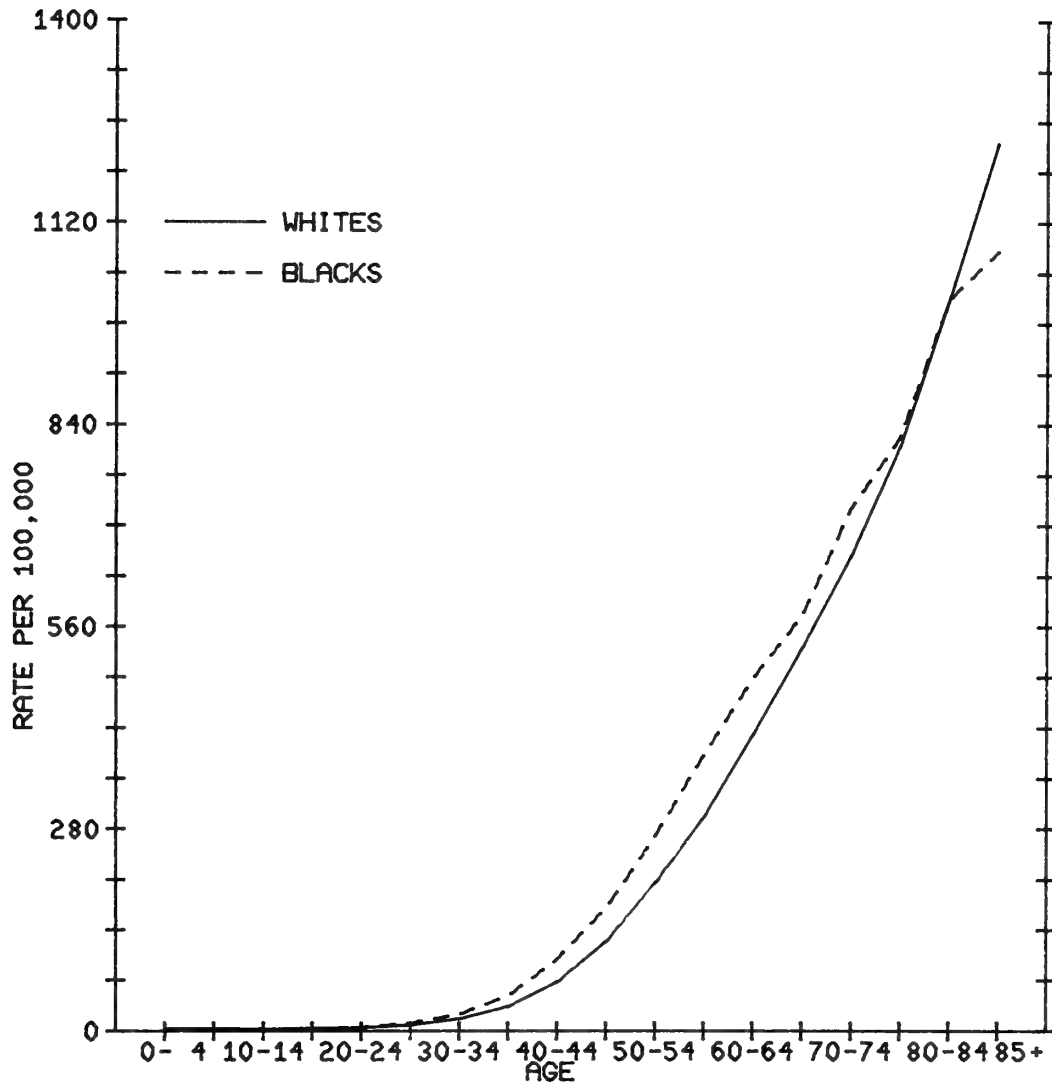


Figure III-4

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Bladder Male

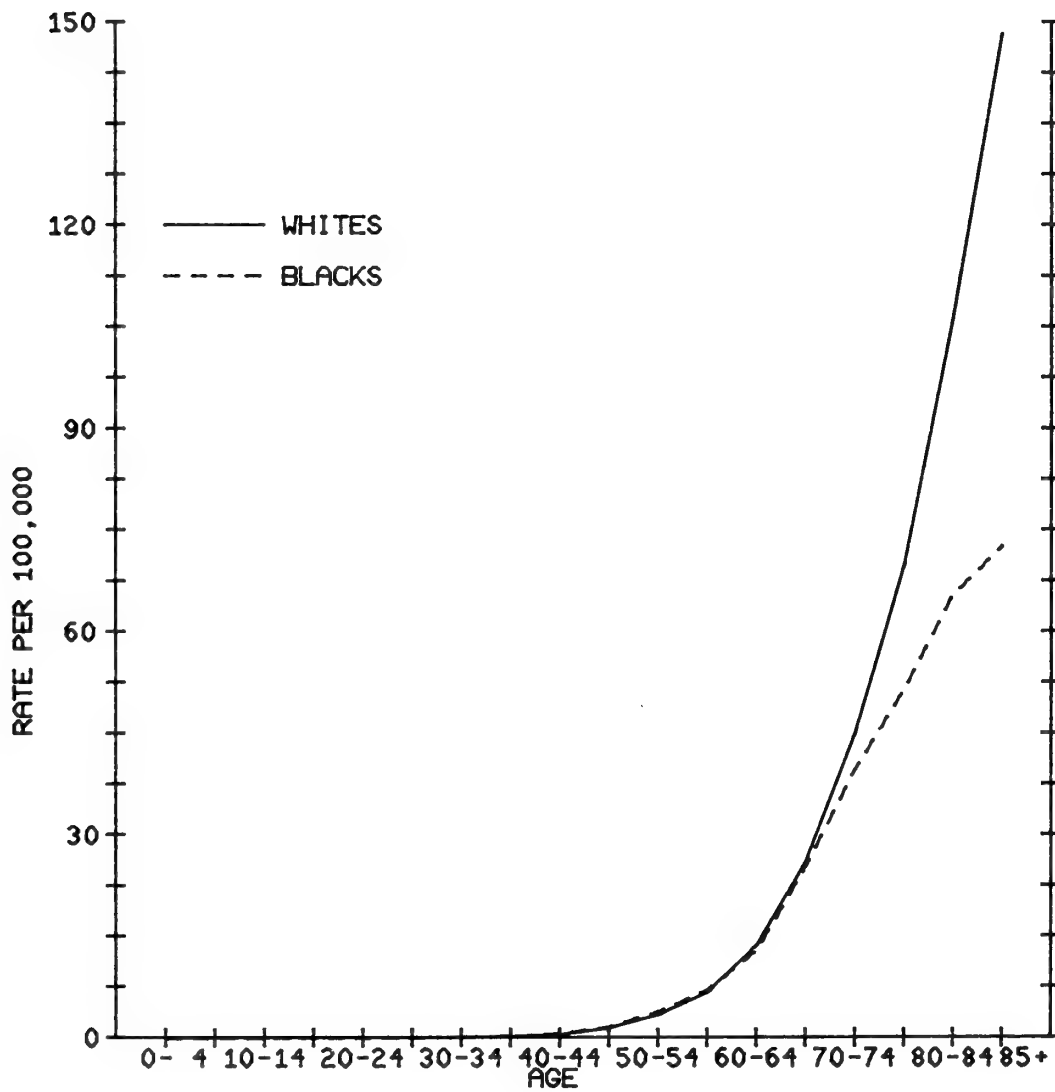


Figure III-5

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Bladder Female

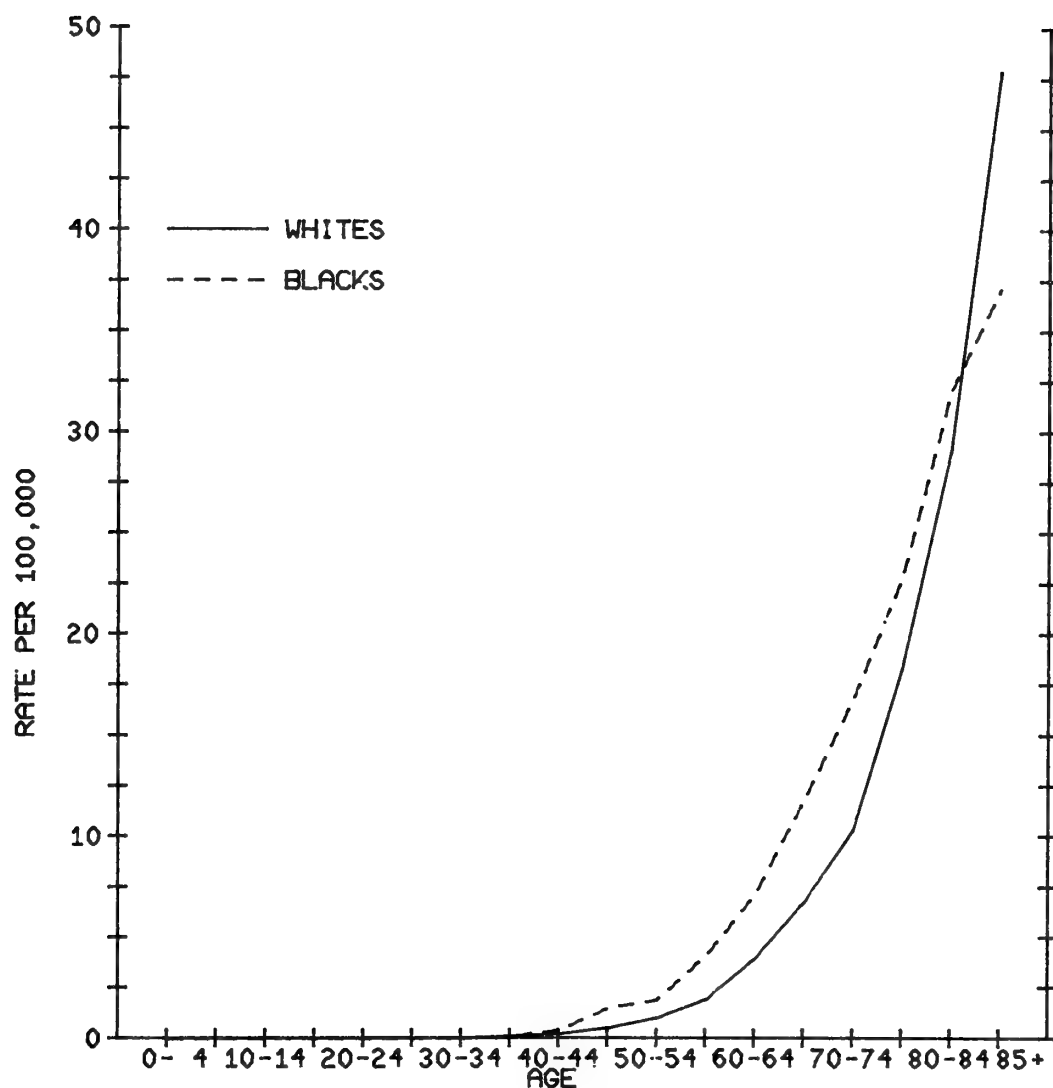


Figure III-6

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Breast Female

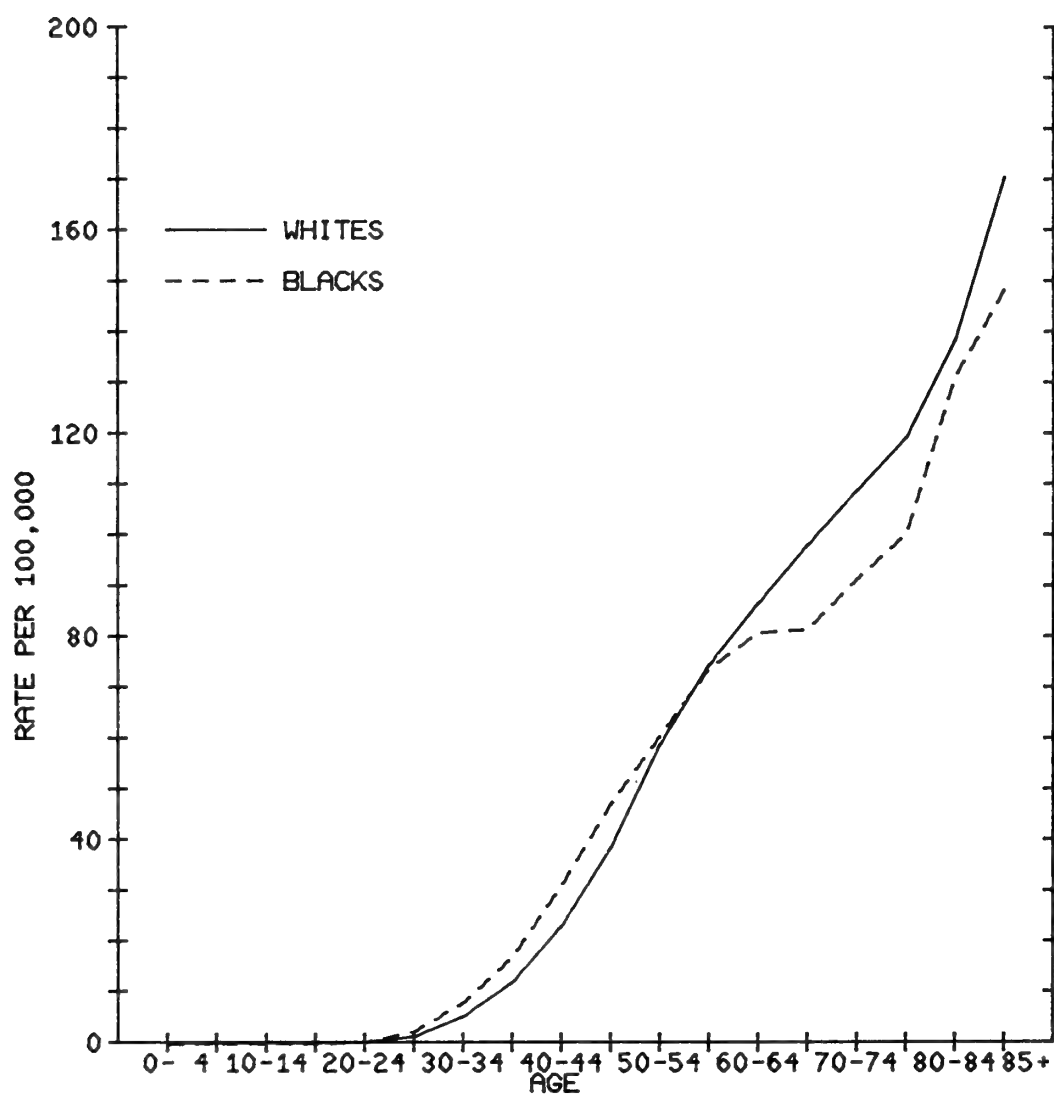


Figure III-7

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Cervix Uteri

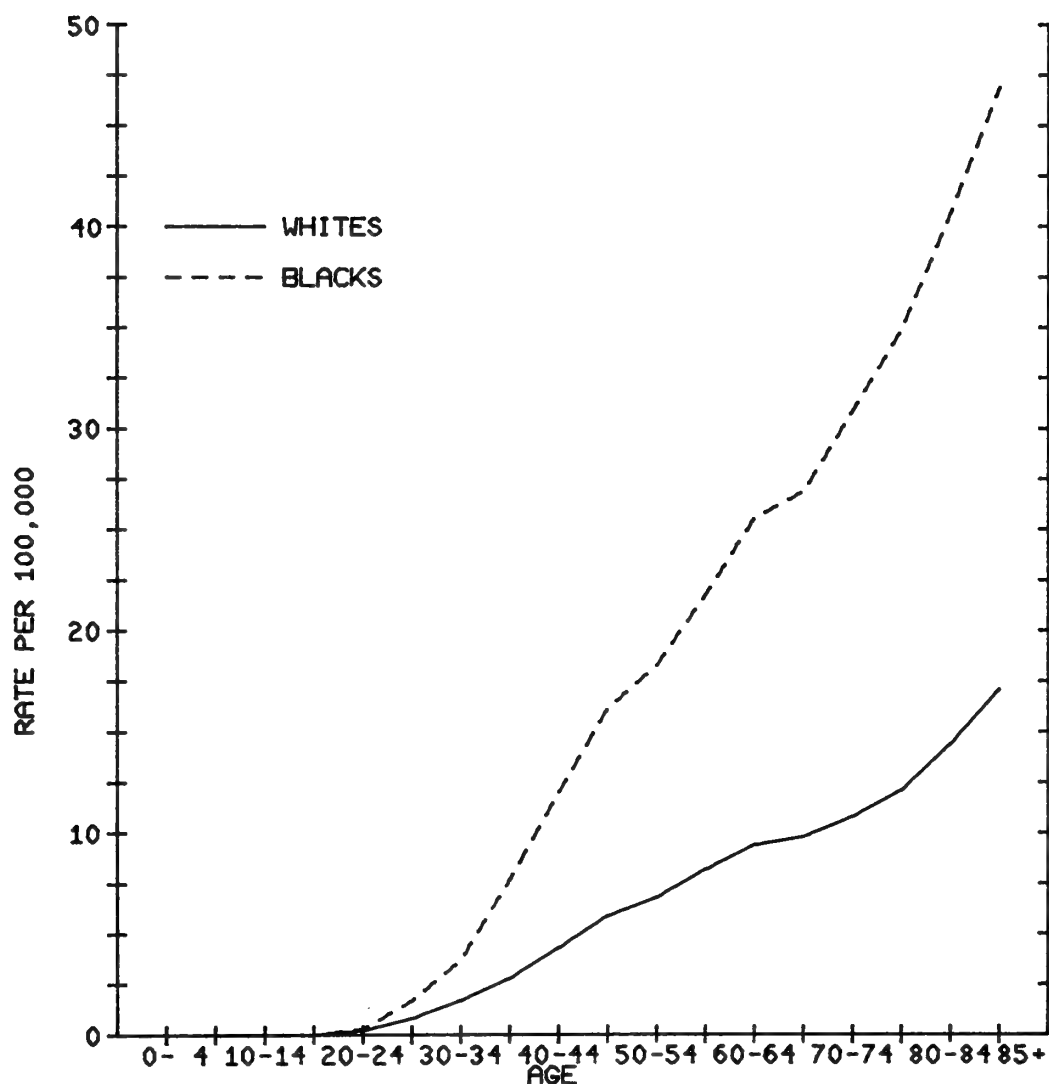


Figure III-8

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Colon Male

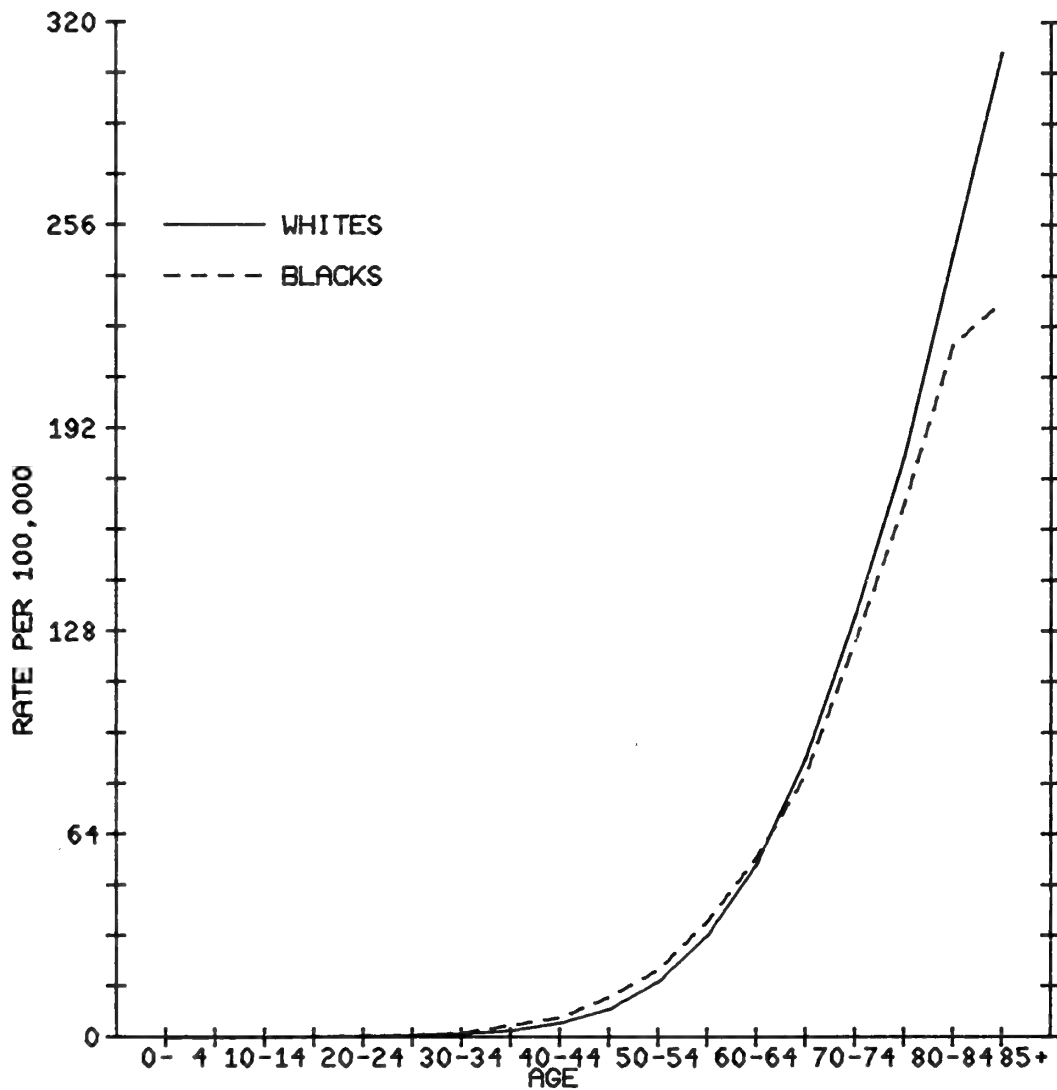


Figure III-9

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Colon Female

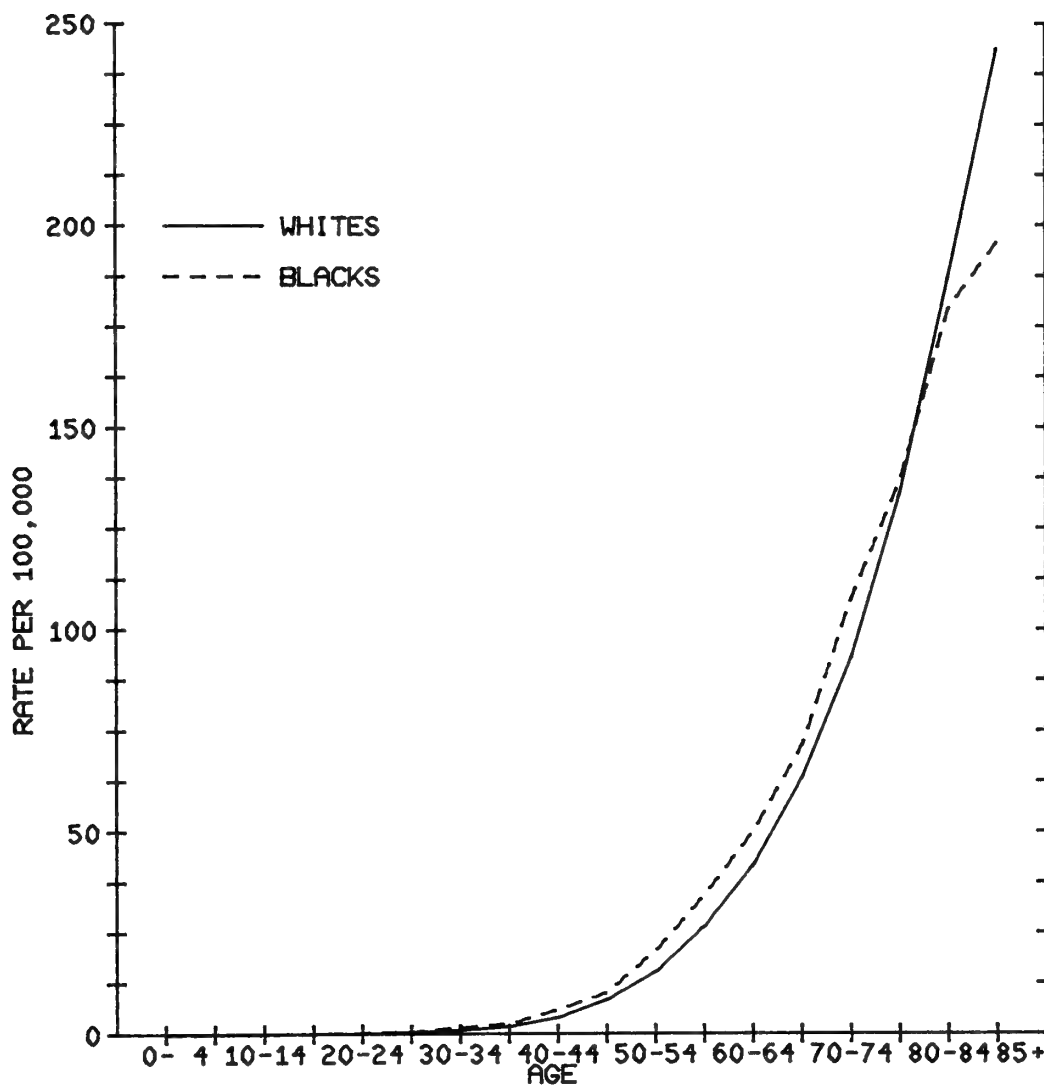


Figure III-10

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Colon and Rectum Male

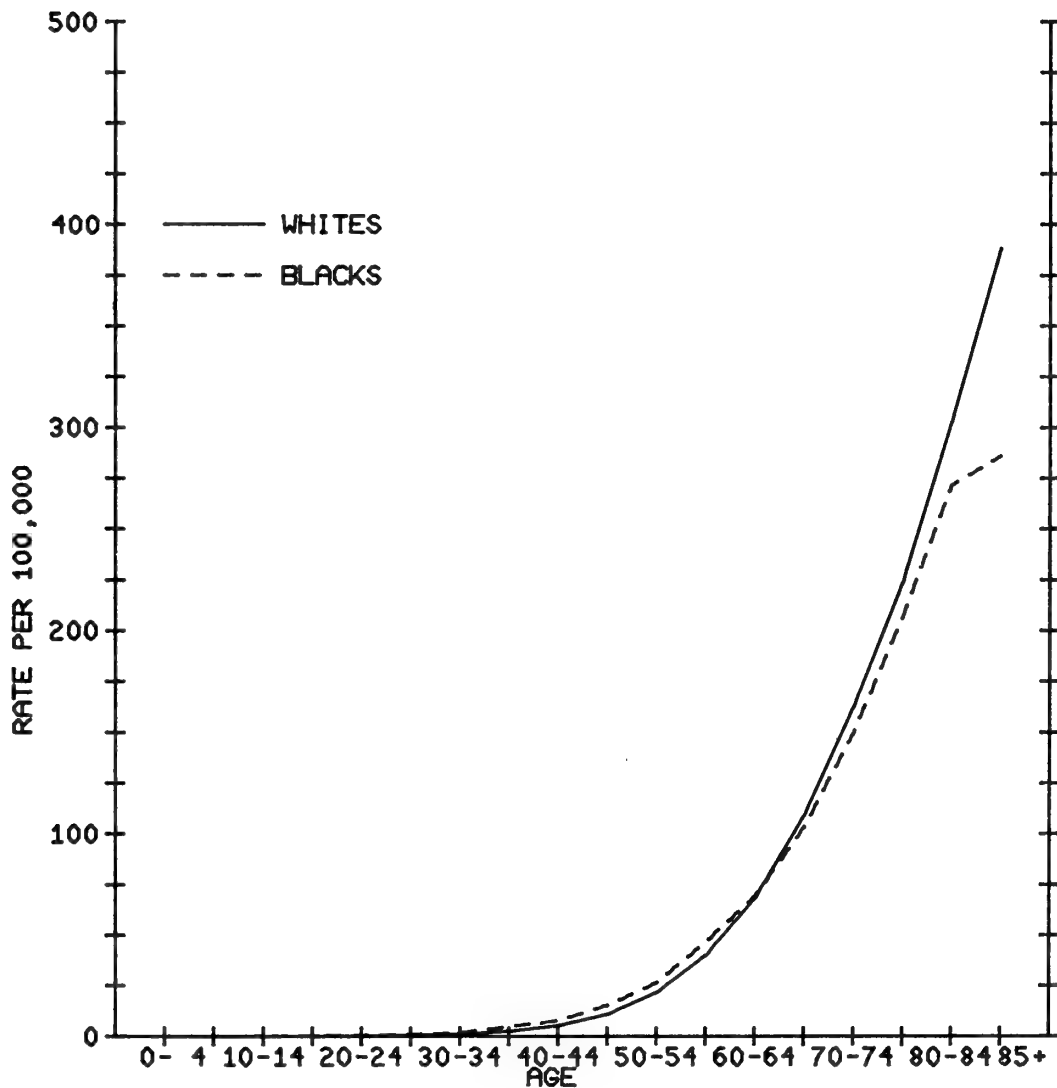




Figure III-11

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Colon and Rectum Female

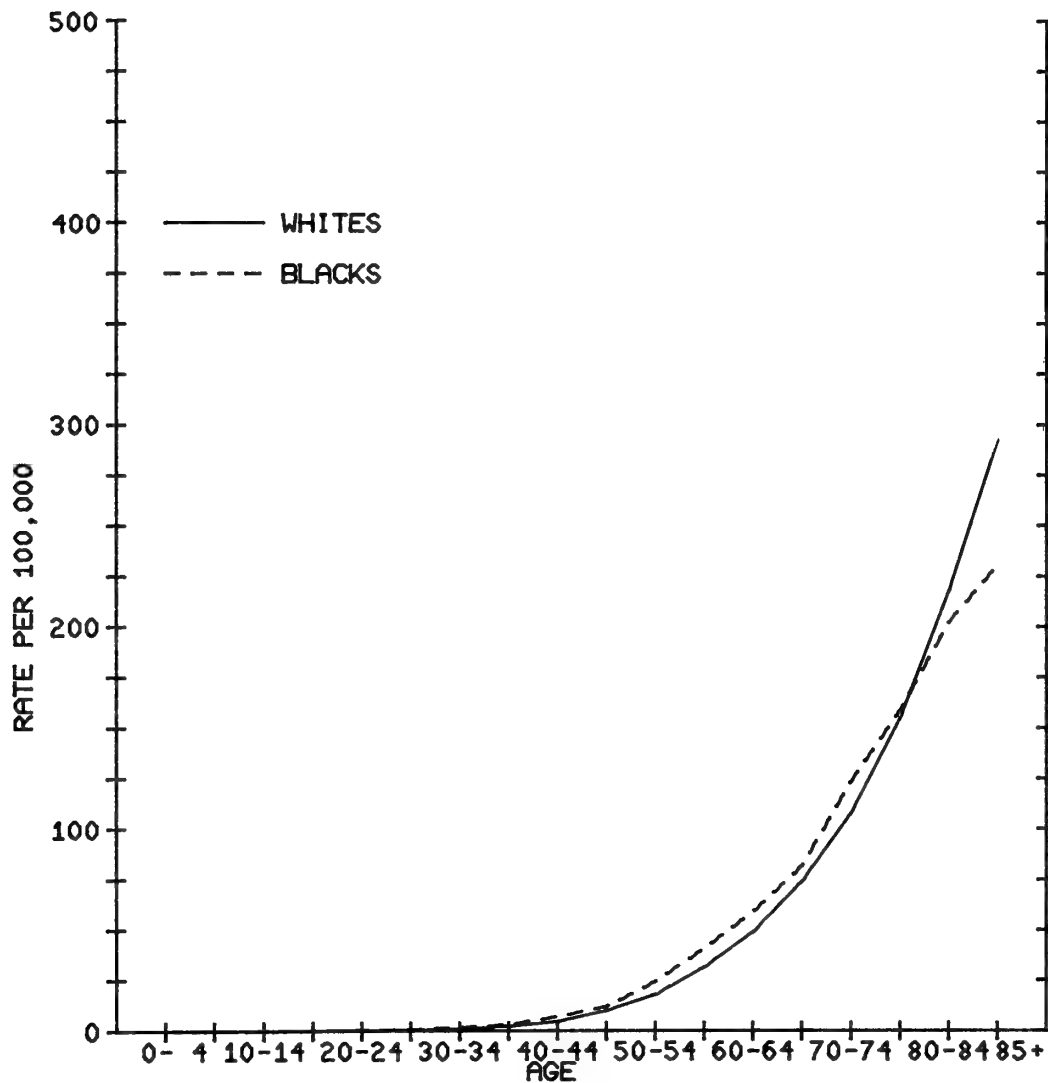




Figure III-12

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Corpus Uteri

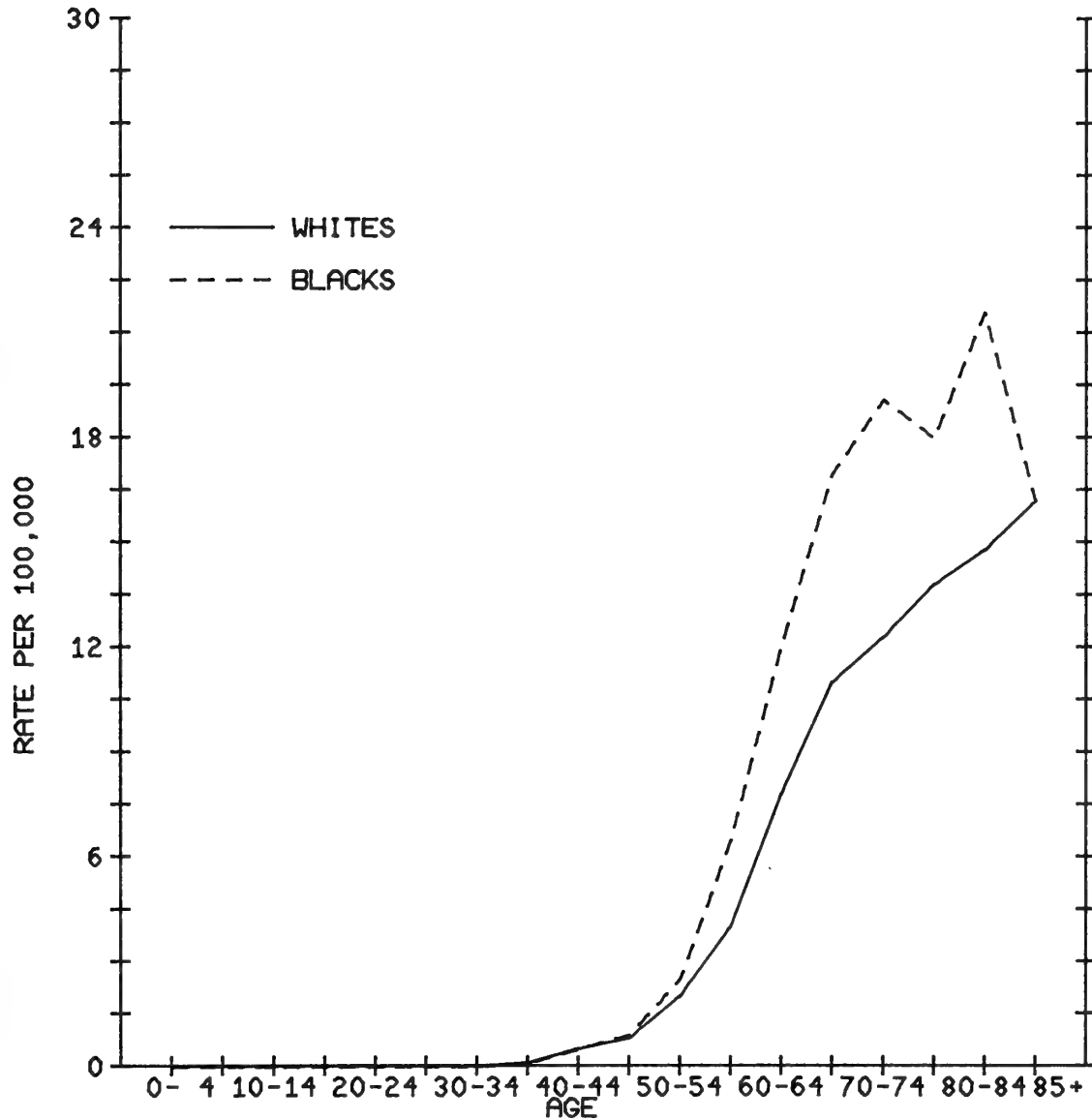


Figure III-13

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Esophagus Male

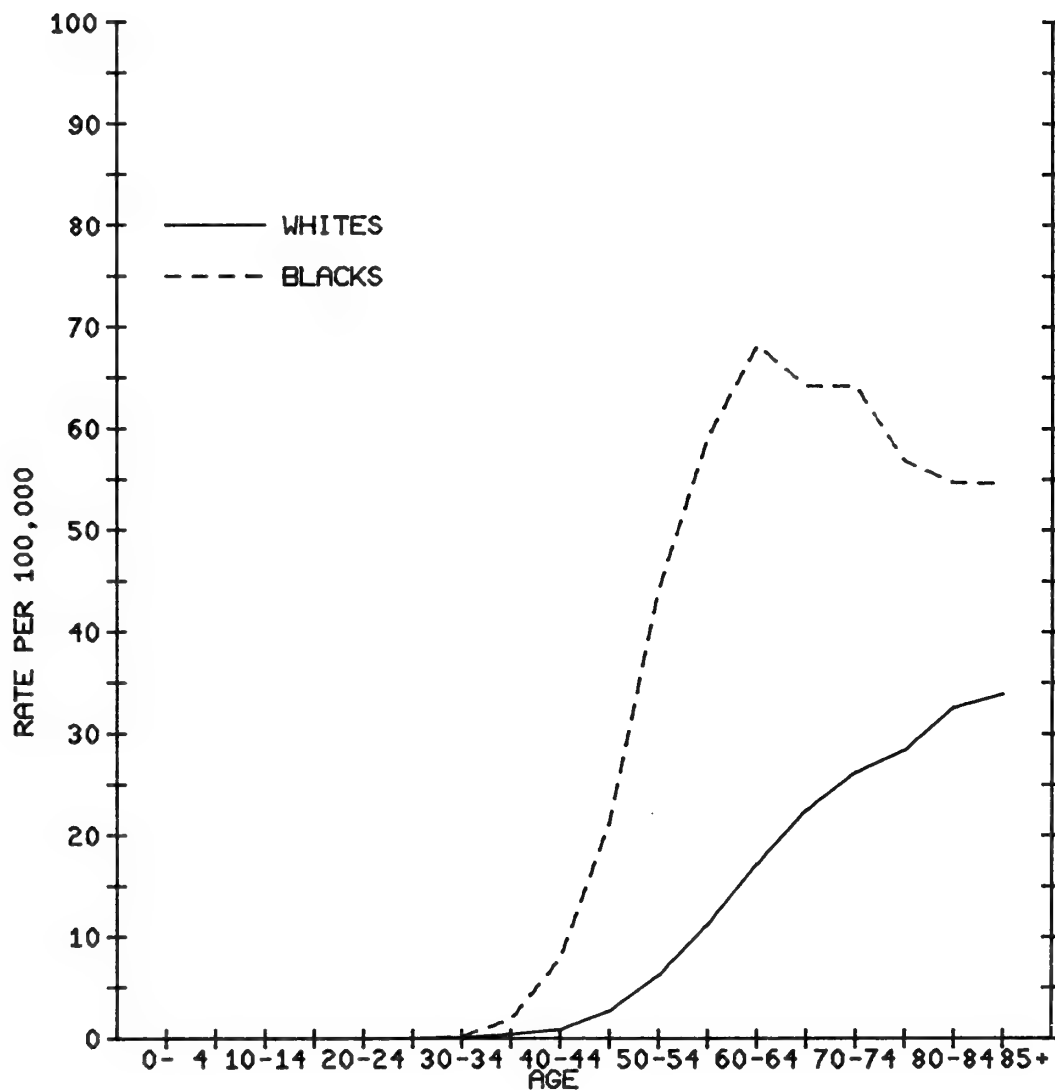


Figure III-14

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Esophagus Female

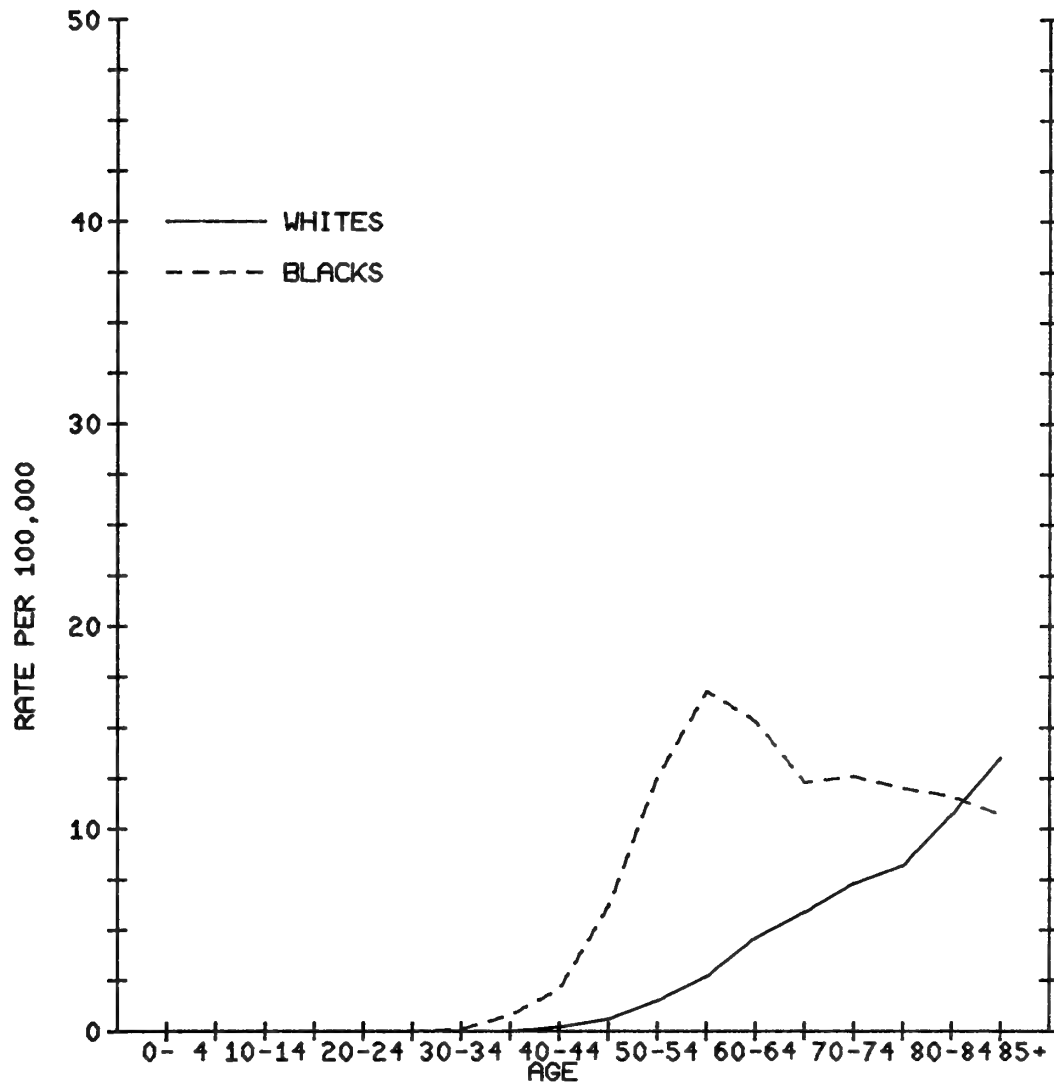


Figure III-15

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Larynx Male

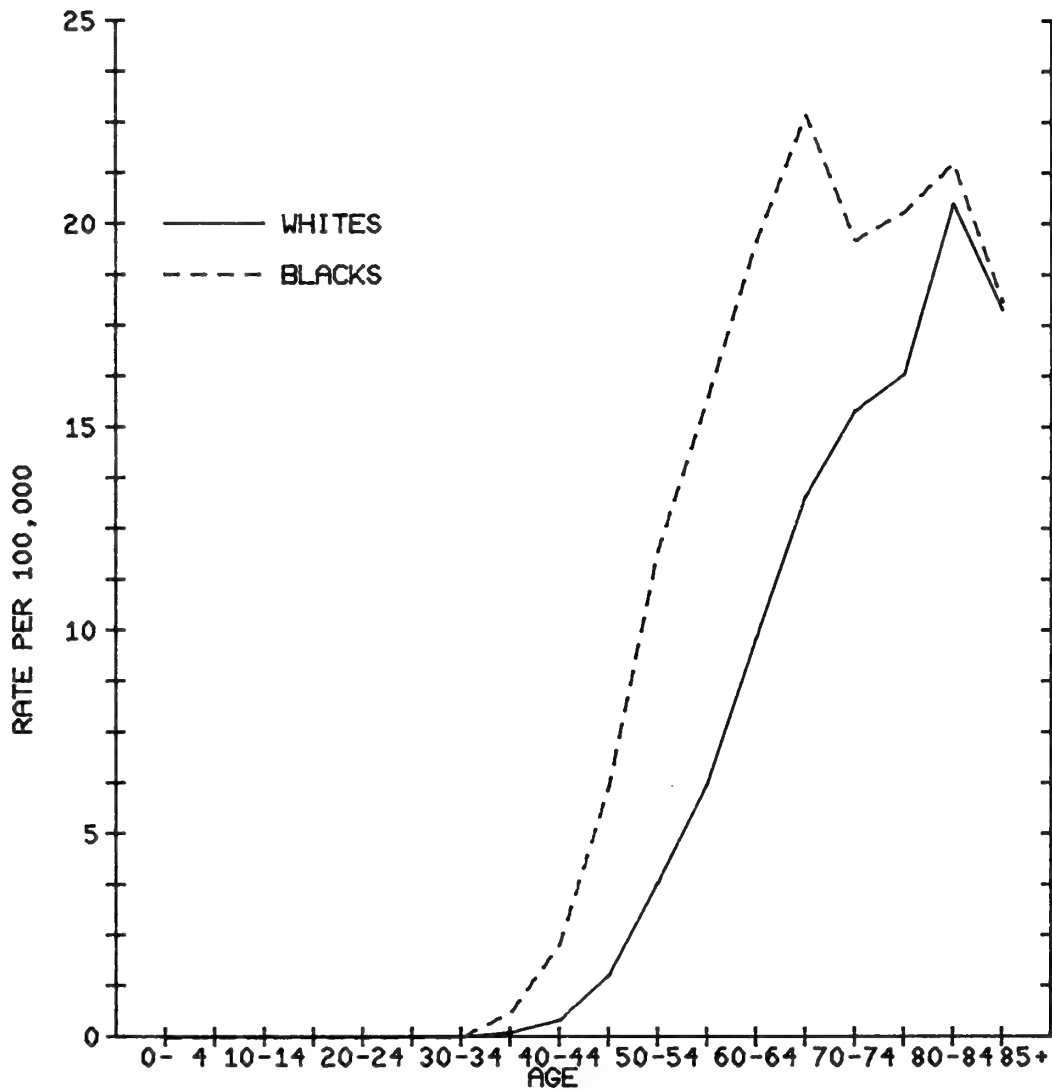


Figure III-16

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Larynx Female

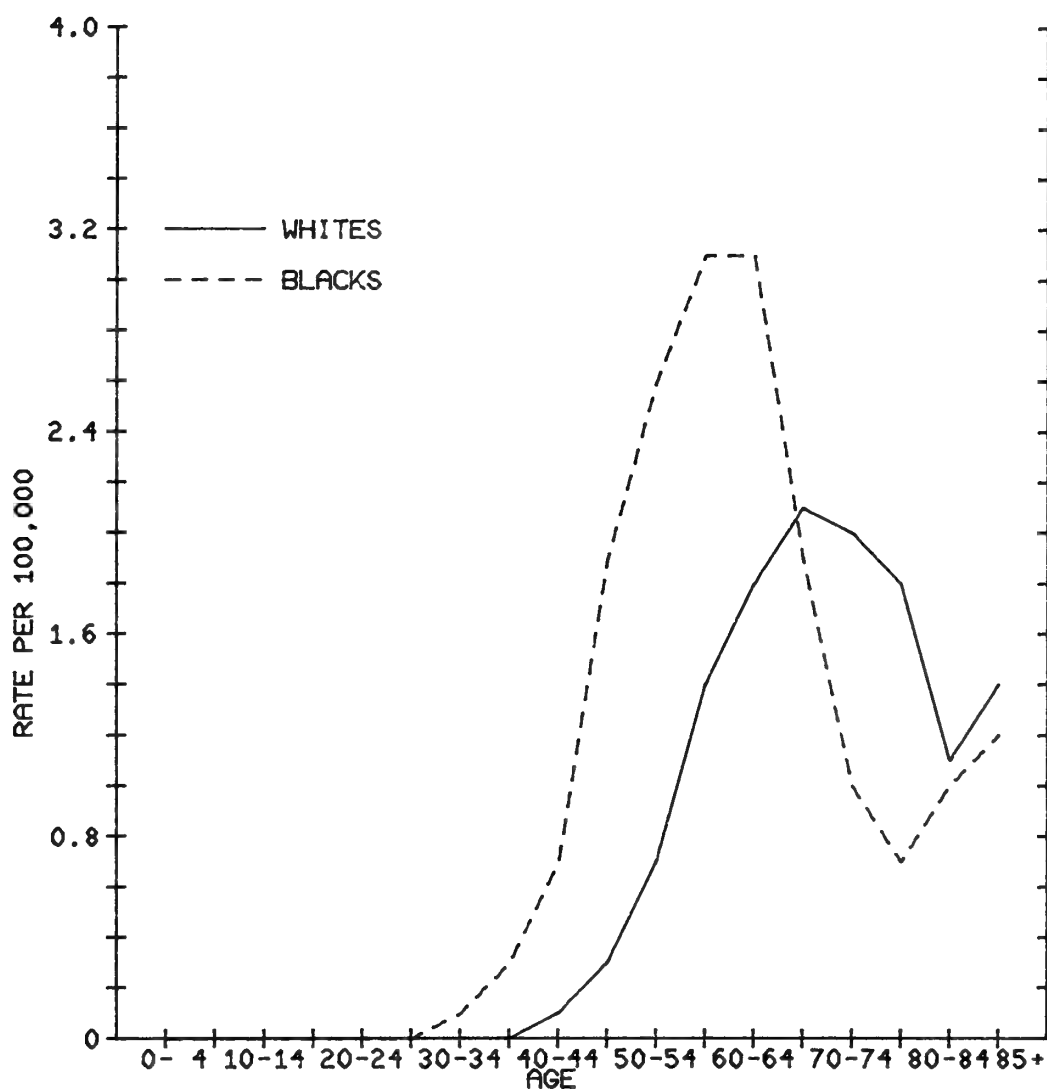


Figure III-17

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Lung Male

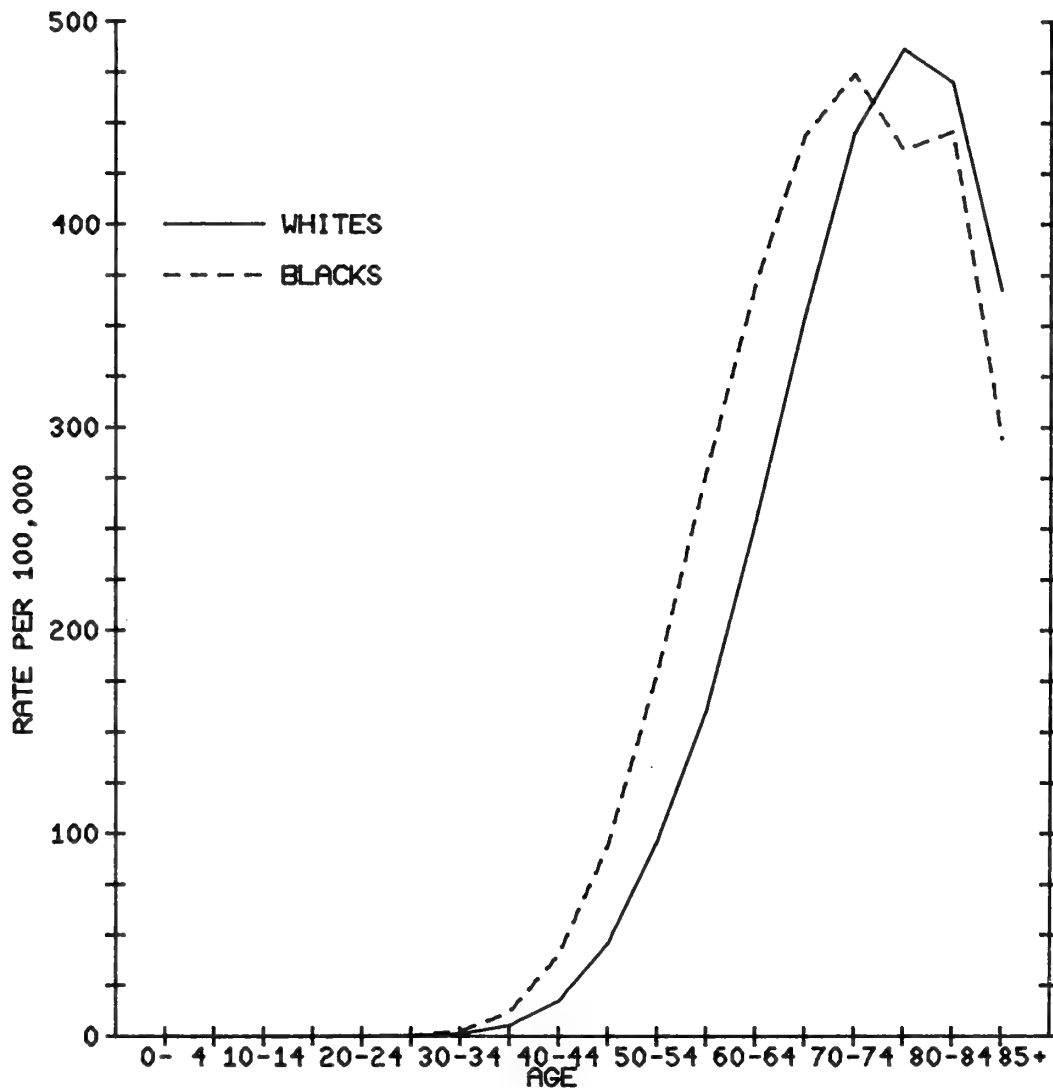




Figure III-18

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Lung Female

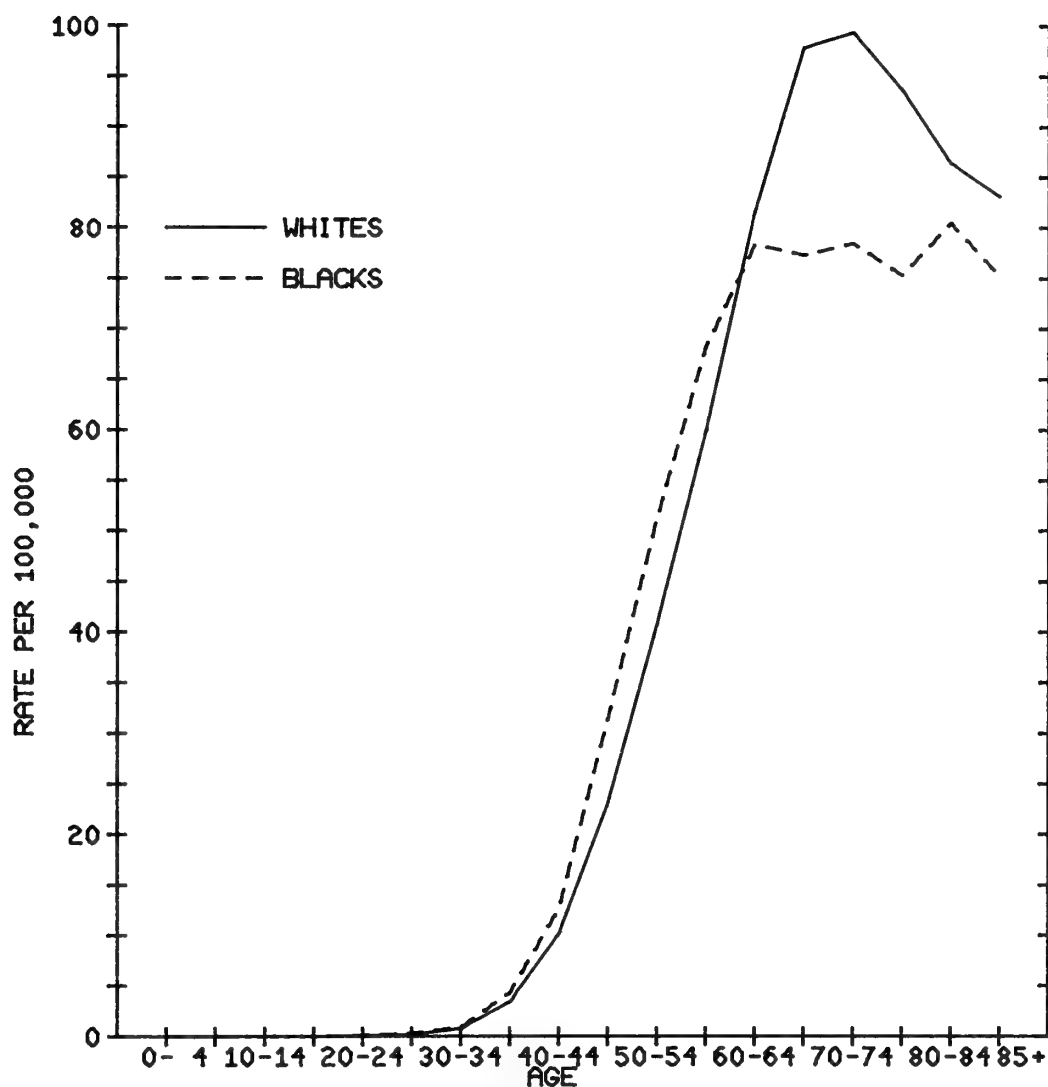


Figure III-19

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Multiple Myeloma Male

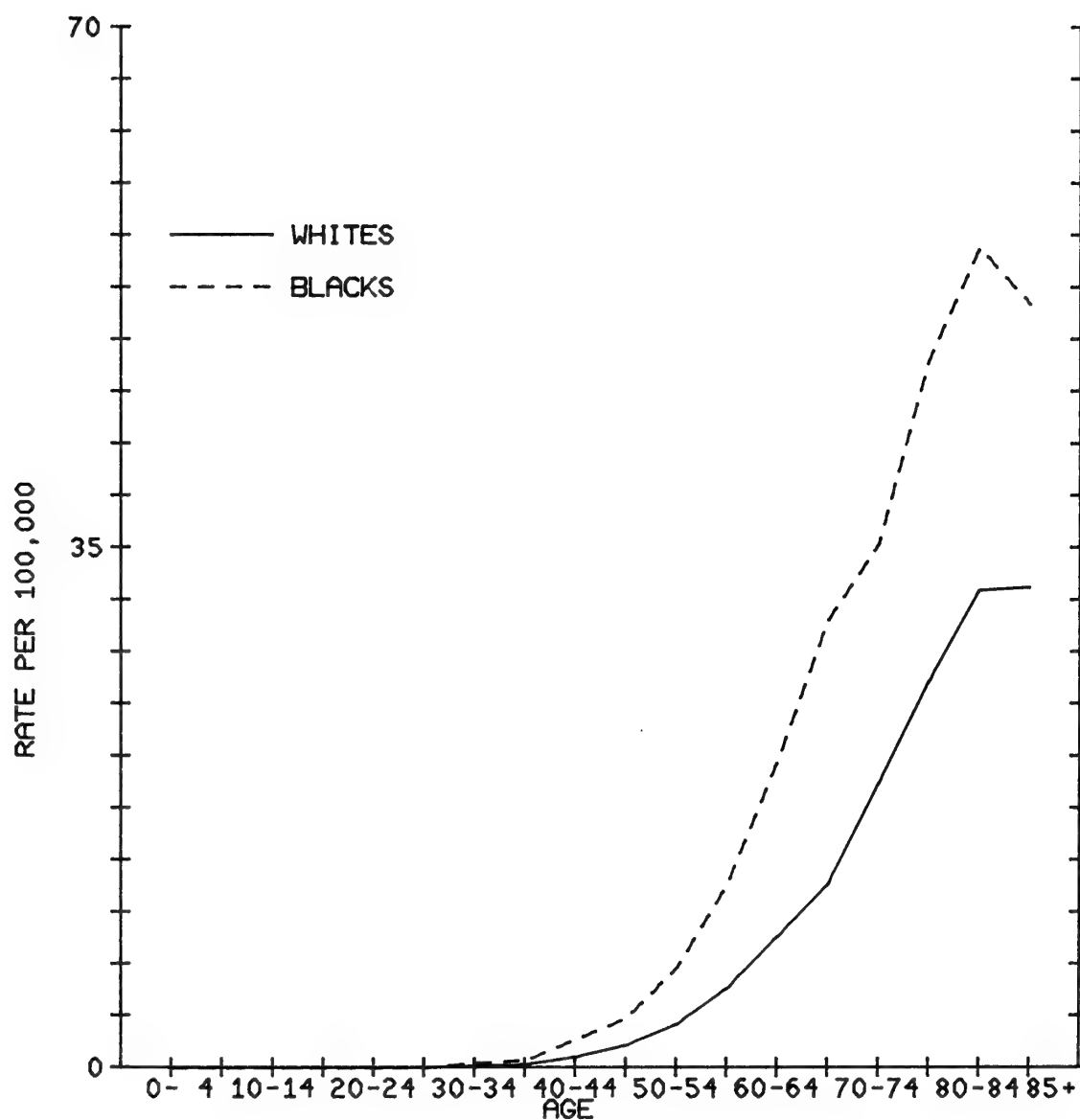


Figure III-20

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Multiple Myeloma Female

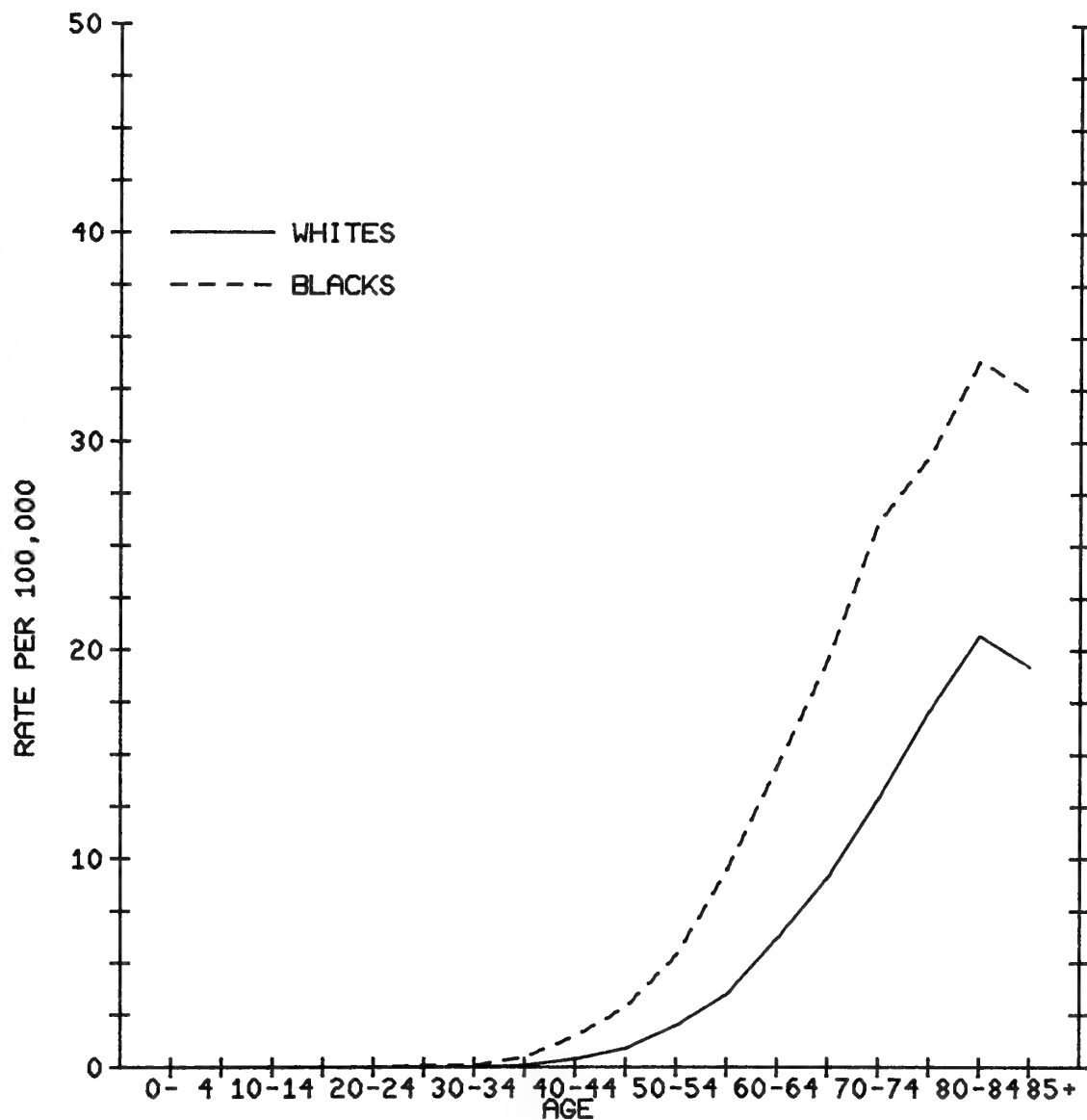




Figure III-21

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Ovary

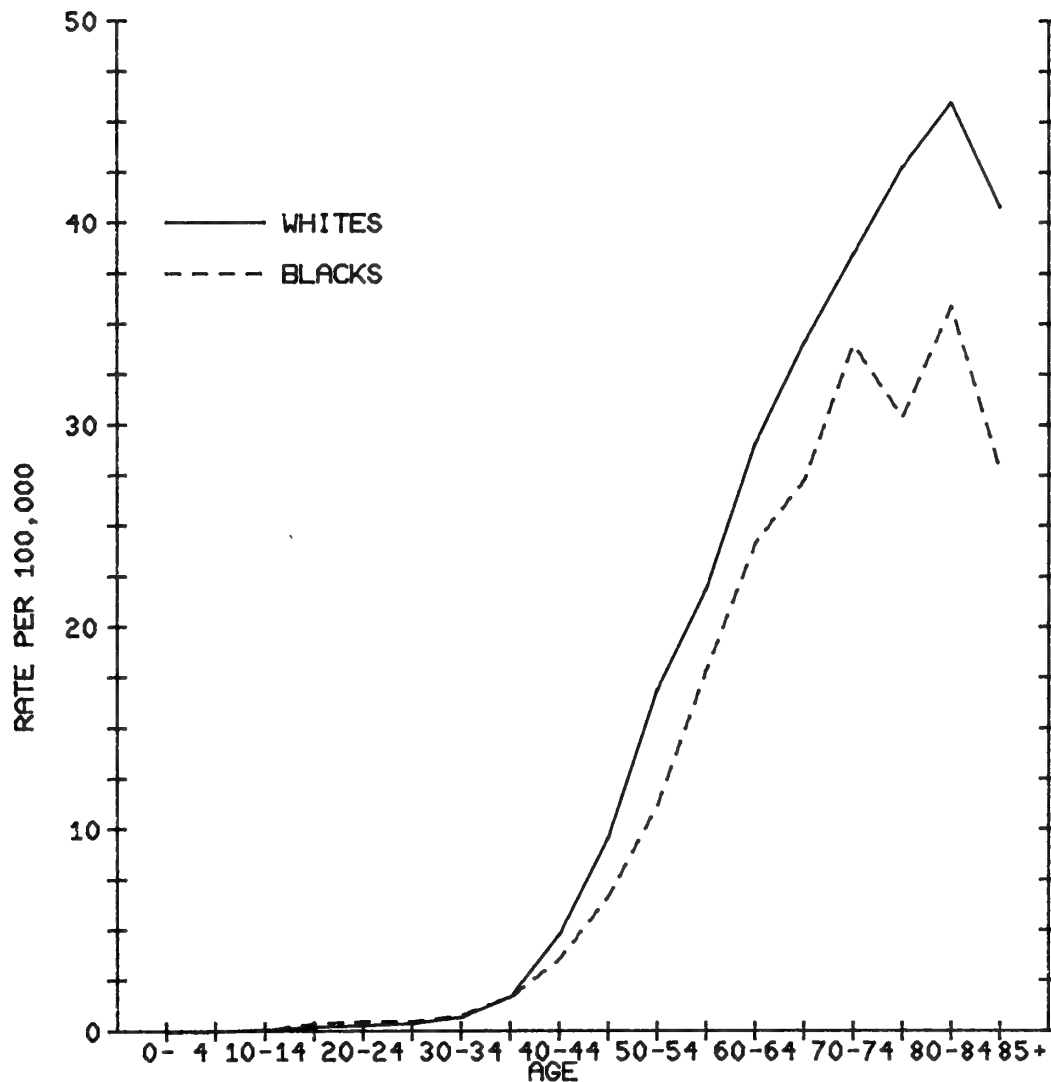


Figure III-22

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Pancreas Male

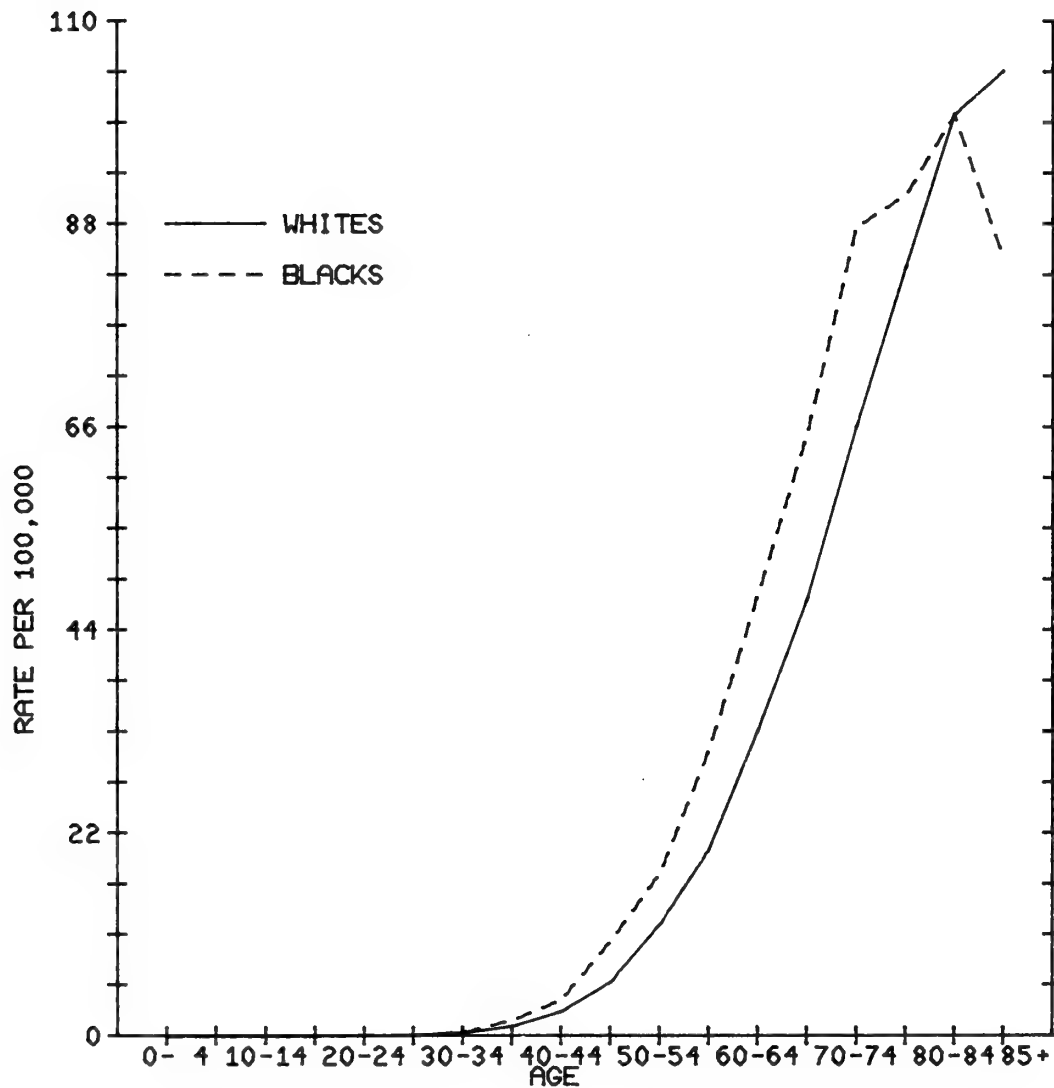


Figure III-23

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Pancreas Female

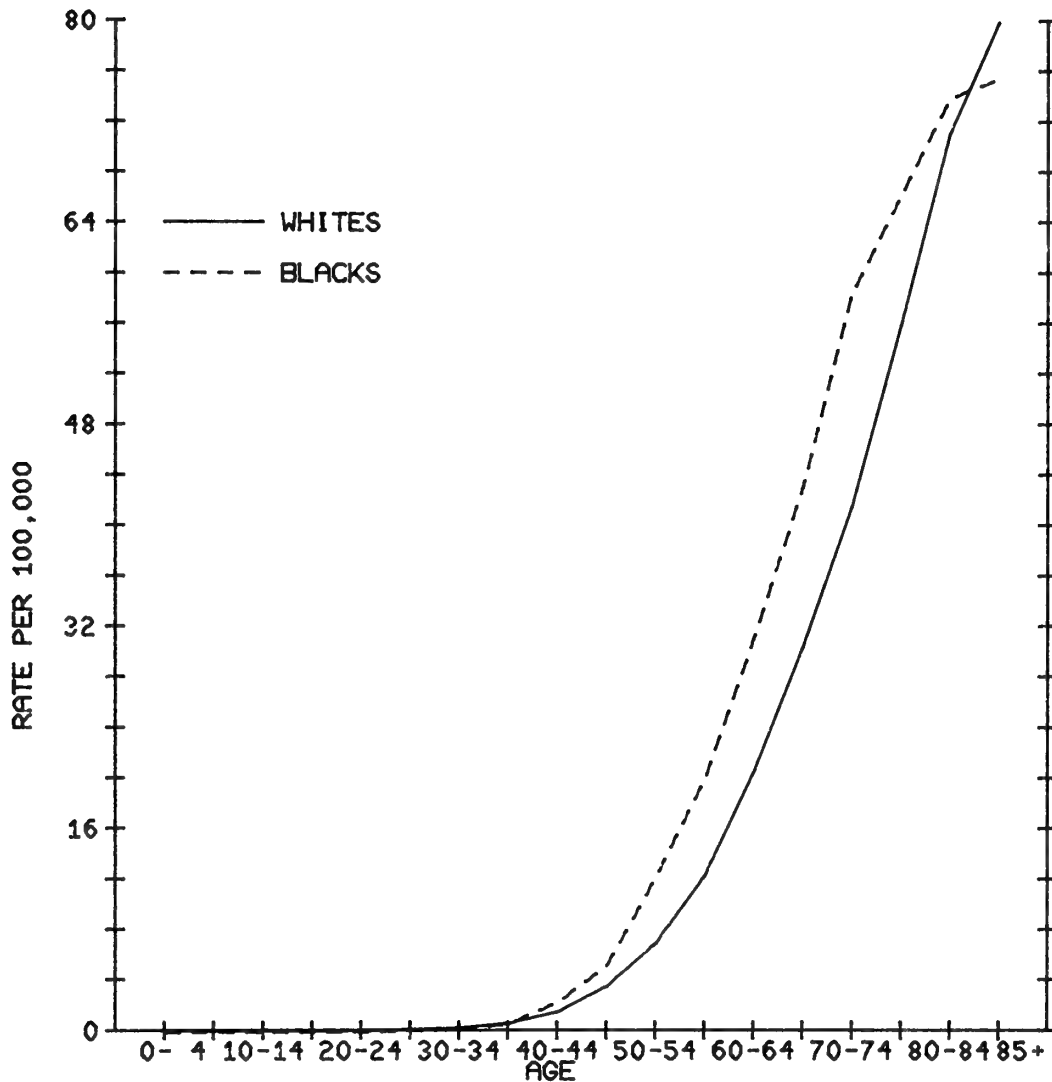






Figure III-24

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Prostate

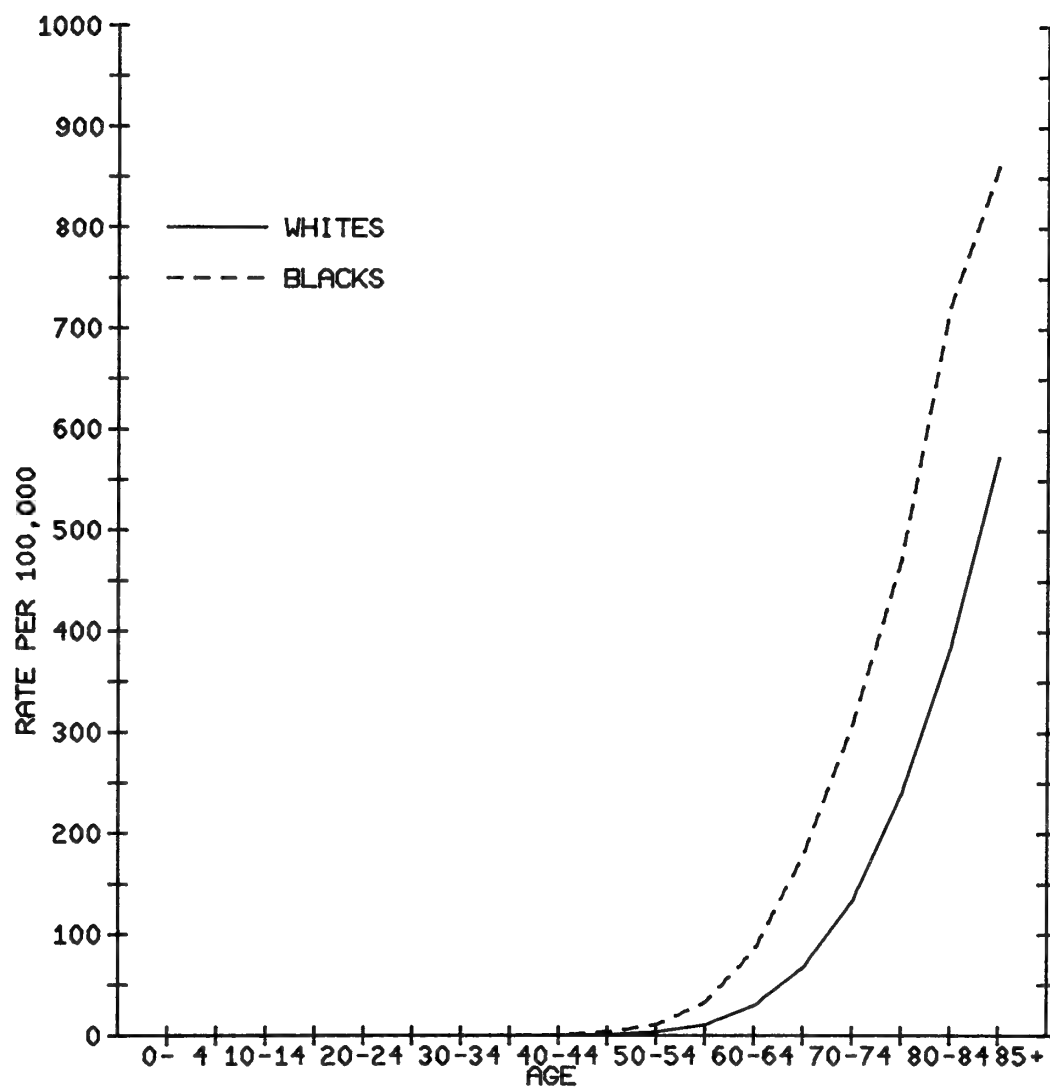


Figure III-25

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Rectum Male

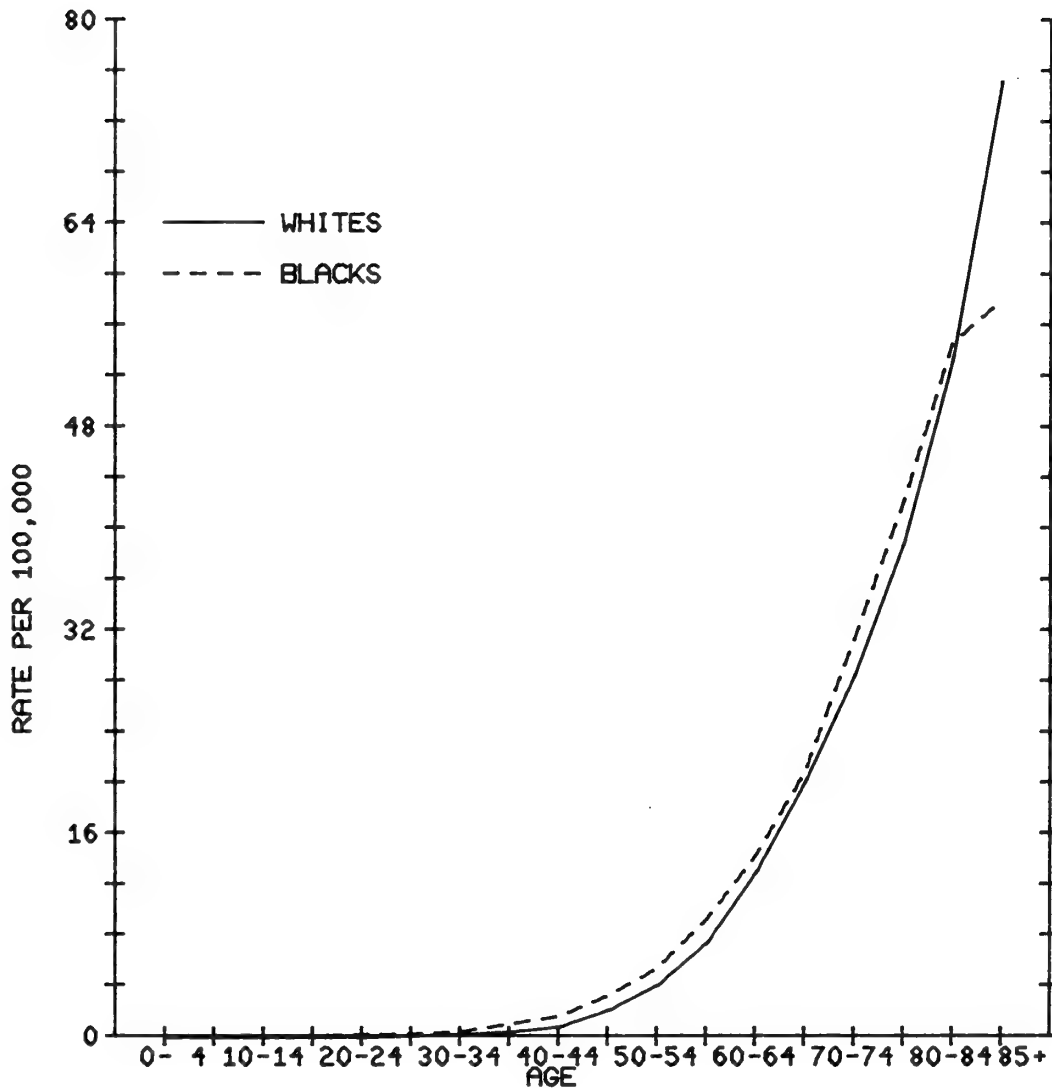


Figure III-26

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Rectum Female

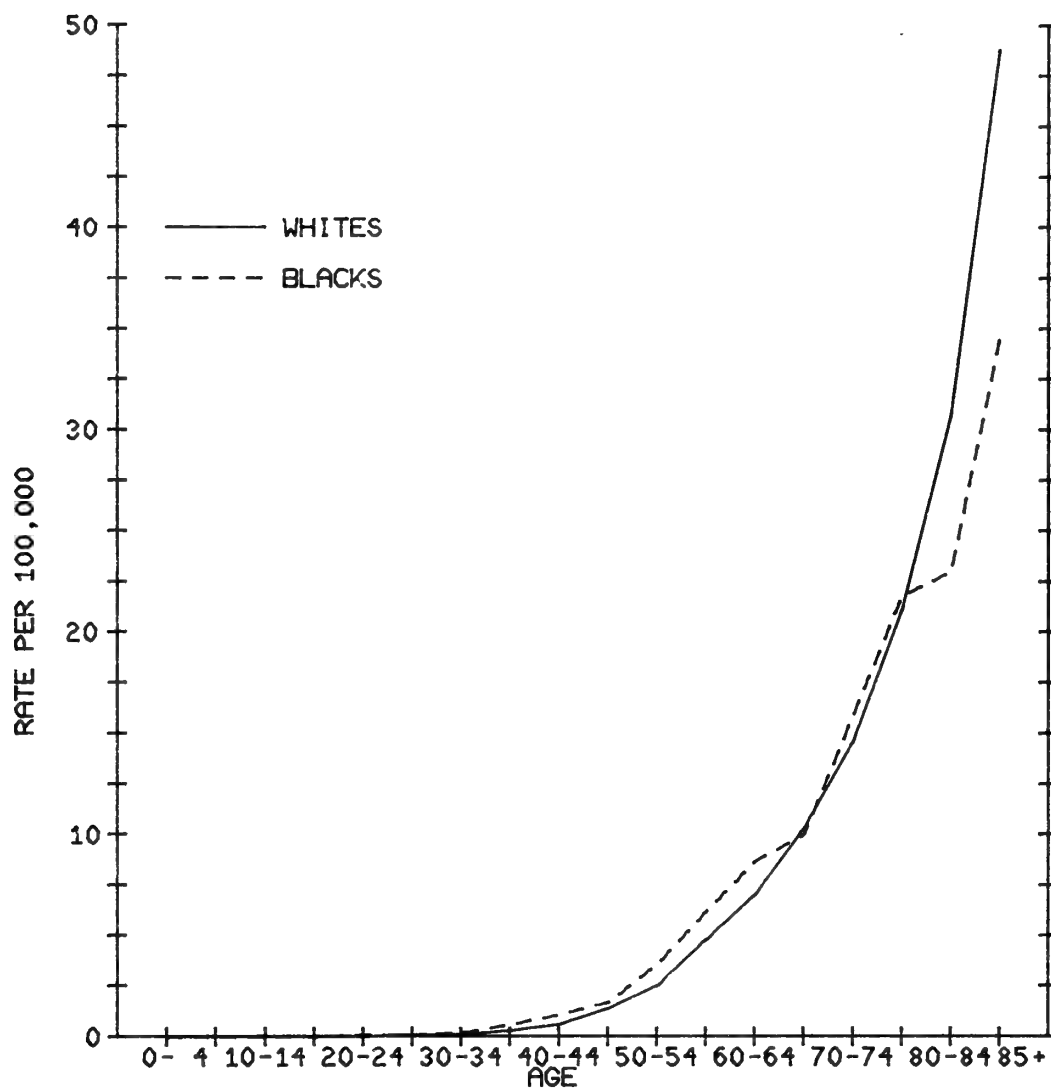


Figure III-27

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

## Stomach Male

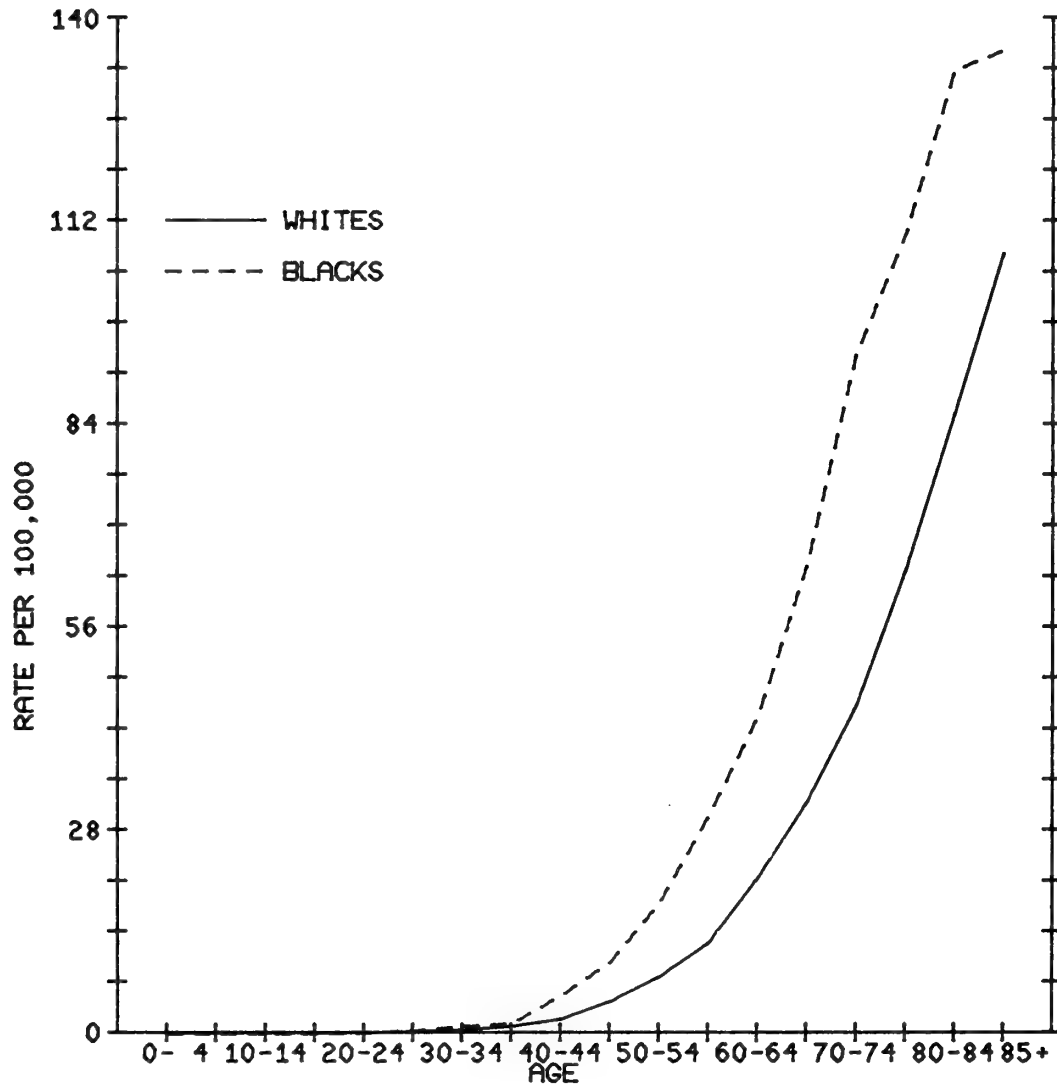
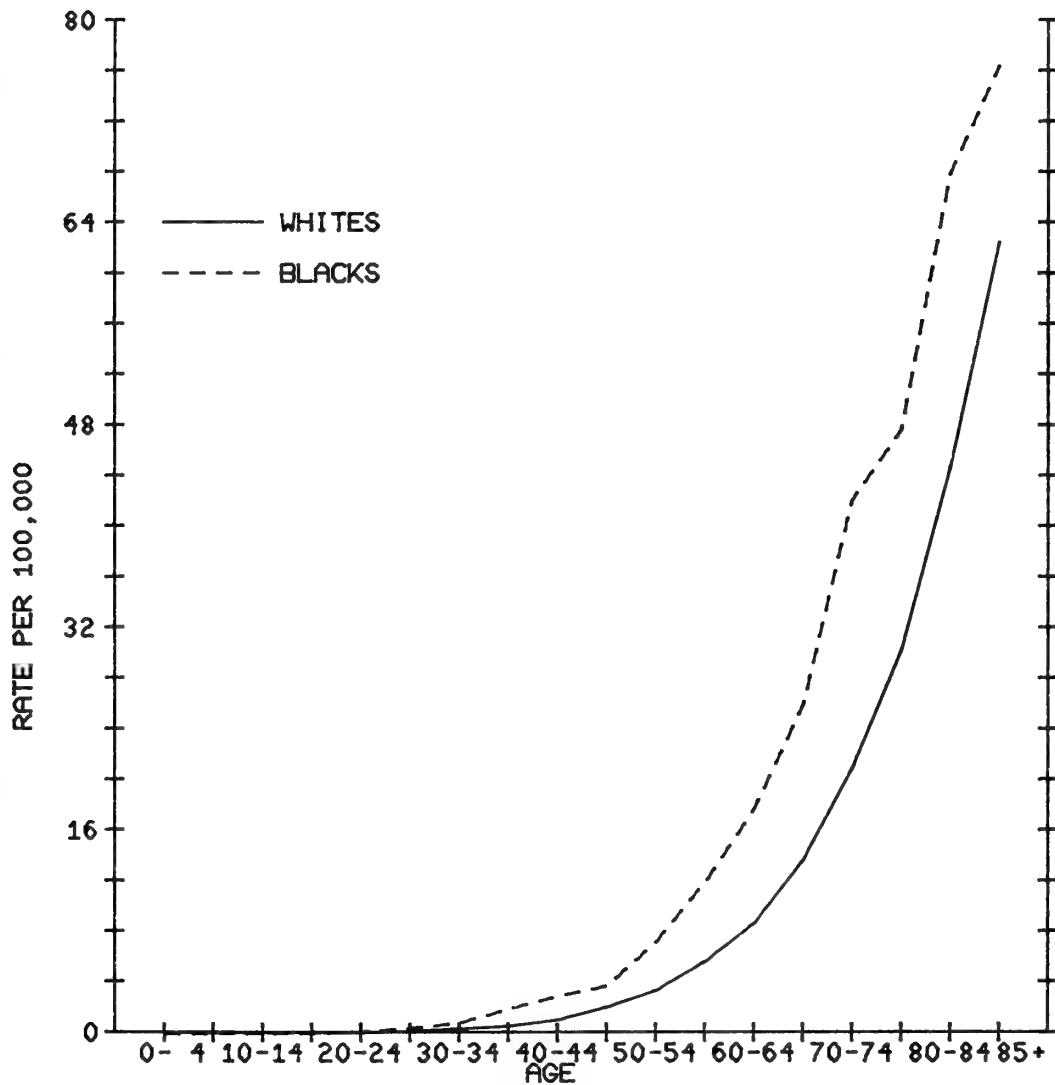


Figure III-28

# Age-specific Cancer Mortality Rates per 100,000 for Blacks and Whites: 1978-81

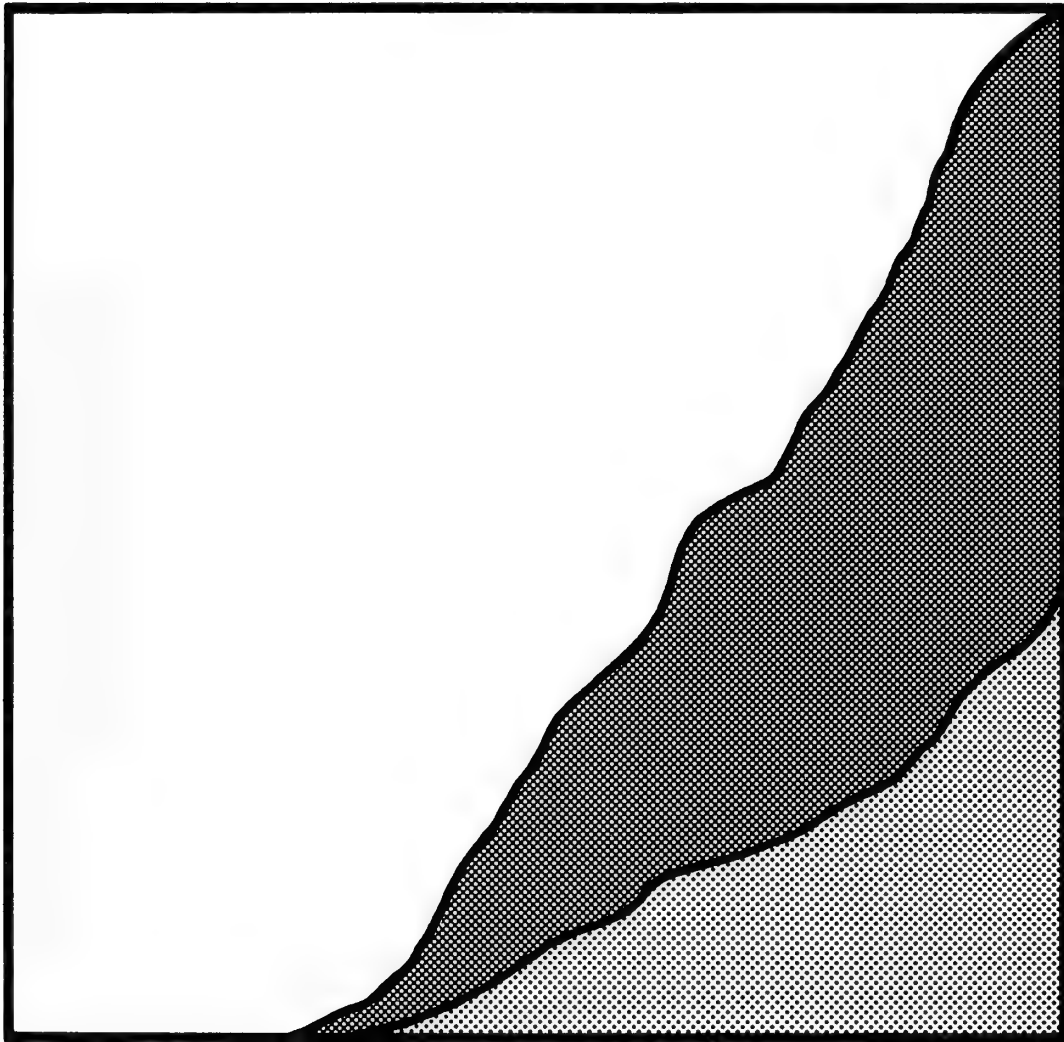
## Stomach Female





# **Section IV.**

## **Five-Year Relative Survival For Blacks, Whites, And Other Groups**







# TABLE OF CONTENTS

SECTION IV. FIVE-YEAR RELATIVE SURVIVAL FOR BLACKS, WHITES, AND OTHER GROUPS		Page
Discussion .....		127
Table IV-1.	Five-year Relative Survival Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1973-81 .....	129
<i>Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81</i>		
Figure IV-1.	All Sites Combined .....	130
Figure IV-2.	Bladder .....	131
Figure IV-3.	Breast, Female .....	132
Figure IV-4.	Cervix Uteri .....	133
Figure IV-5.	Colon .....	134
Figure IV-6.	Colon and Rectum .....	135
Figure IV-7.	Corpus Uteri .....	136
Figure IV-8.	Esophagus .....	137
Figure IV-9.	Larynx .....	138
Figure IV-10.	Lung and Bronchus .....	139
Figure IV-11.	Lung and Bronchus, Male .....	140
Figure IV-12.	Lung and Bronchus, Female .....	141
Figure IV-13.	Multiple Myeloma .....	142
Figure IV-14.	Ovary .....	143
Figure IV-15.	Pancreas .....	144
Figure IV-16.	Prostate .....	145
Figure IV-17.	Rectum .....	146
Figure IV-18.	Stomach .....	147



## **Section IV. Five-Year Relative Survival for Blacks, Whites, and Other Groups**

### **Discussion**

This section presents information about the cancer survival patterns of blacks, whites, and other racial/ethnic groups. The five-year relative survival rates shown represent the percentage of persons with cancer who will be alive five years after diagnosis, after adjusting for age, race, and sex mortality differences. This information comes from the reports of patients first diagnosed within SEER geographic areas, 1973-81. The term "Anglo" as shown in the bar graphs and tables in this section refers to non-Hispanic whites.

The first table is a summary of five-year relative survival rates for all sites of cancer combined. The first figure is a bar graph comparing the average five-year relative survival rates for cancer, all sites combined, for blacks, whites, and other groups. This is followed by a series of bar graphs showing five-year relative survival rates for selected cancer sites for the same groups.

#### **Highlights**

- The five-year relative survival rate for all cancer sites combined among Japanese-Americans was 51 percent, the highest rate among the eight racial/ethnic groups presented. Whites, or Anglos, had the next highest rate (50 percent). Native Americans had the lowest overall five-year relative survival rate (34 percent).
- Japanese-Americans had the highest five-year relative survival rates for cancers of the female breast, colon, rectum, and stomach.
- Chinese-Americans had the highest five-year relative survival rate for cancer of the lung and bronchus for men.
- Hawaiians had the highest five-year relative survival rate for cancer of the bronchus for women.
- Blacks had the lowest five-year relative survival rates for cancers of the cervix uteri, corpus uteri, and esophagus.
- Filipinos had the lowest five-year relative survival rates for cancers of the colon, and for lung and bronchus in women.
- Native Americans had the lowest five-year relative survival rates for cancers of the stomach and lung and bronchus for men.
- The lowest five-year relative survival rates among all of the racial/ethnic groups were for cancers of the pancreas. Only 2-3 percent of persons diagnosed with pancreatic cancer within each group were alive after five years.



Table IV-1

# **Five-year Relative Survival Rates by Primary Site and Racial/Ethnic Group, SEER Program, 1973-81 (percent)**

Primary Site	Anglos <sup>3</sup>	Blacks	Hispanics	Japanese	Chinese	Filipinos	Native Hawaiians	Native Americans
All sites	50	38	47	51	44	45	44	34
Bladder	74	50	70	72	74 <sup>1</sup>	49 <sup>1</sup>	48 <sup>2</sup>	37 <sup>2</sup>
Breast, Female	75	63	72	85	78	72	76	53 <sup>1</sup>
Cervix Uteri	68	63	69	72	72 <sup>1</sup>	72 <sup>1</sup>	73	67 <sup>1</sup>
Colon & Rectum	51	44	46	59	50	41	51 <sup>1</sup>	37 <sup>1</sup>
Colon	52	46	48	61	53	38	59 <sup>1</sup>	44 <sup>1</sup>
Rectum	49	37	44	55	44	45	42 <sup>1</sup>	24 <sup>1</sup>
Corpus Uteri	88	57	86	86	87	78 <sup>1</sup>	80 <sup>1</sup>	66 <sup>2</sup>
Esophagus	5	3	—	—	11 <sup>1</sup>	—	—	—
Larynx	67	59	60 <sup>1</sup>	75 <sup>1</sup>	67 <sup>2</sup>	57 <sup>2</sup>	79 <sup>2</sup>	—
Lung & Bronchus	12	11	11	14	15	12	16	5
Male	11	10	9	13	15	12	13	2
Female	16	14	15	17	15	11	24	—
Multiple Myeloma	24	27	21	30 <sup>1</sup>	24 <sup>1</sup>	29 <sup>1</sup>	26 <sup>1</sup>	—
Ovary	37	39	41	41	42 <sup>1</sup>	52 <sup>1</sup>	36 <sup>1</sup>	43 <sup>1</sup>
Pancreas	3	3	2	3	3	2	—	—
Prostate	69	59	71	76	76 <sup>1</sup>	73	85 <sup>1</sup>	47 <sup>1</sup>
Stomach	14	15	16	28	16	16	14	9

<sup>1</sup> Standard error between 5 & 10%.

<sup>2</sup> Standard error 10%.

<sup>3</sup> Caucasians not of Hispanic origin or surname.

Figure IV-1

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**All Sites Combined**

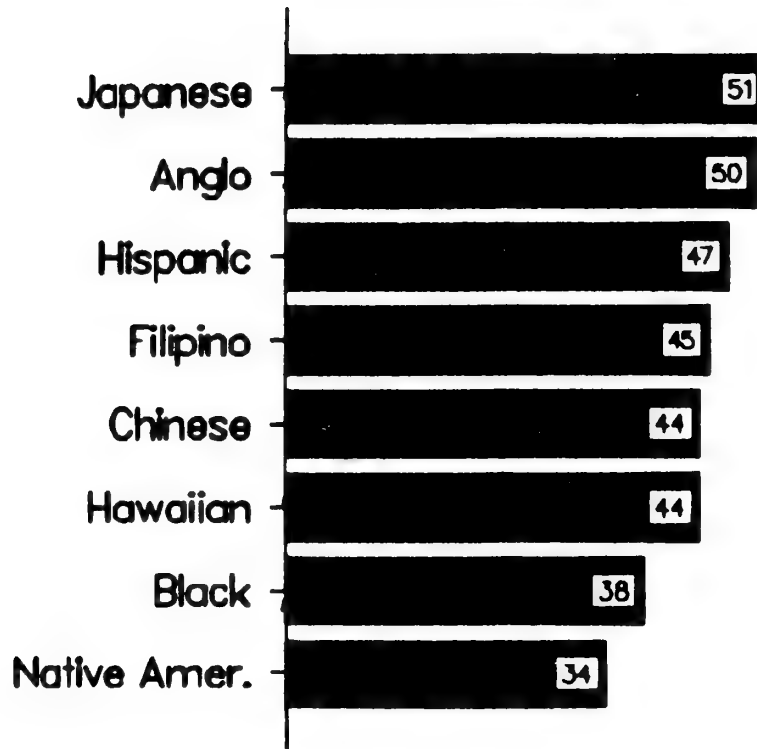


Figure IV-2

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Bladder**

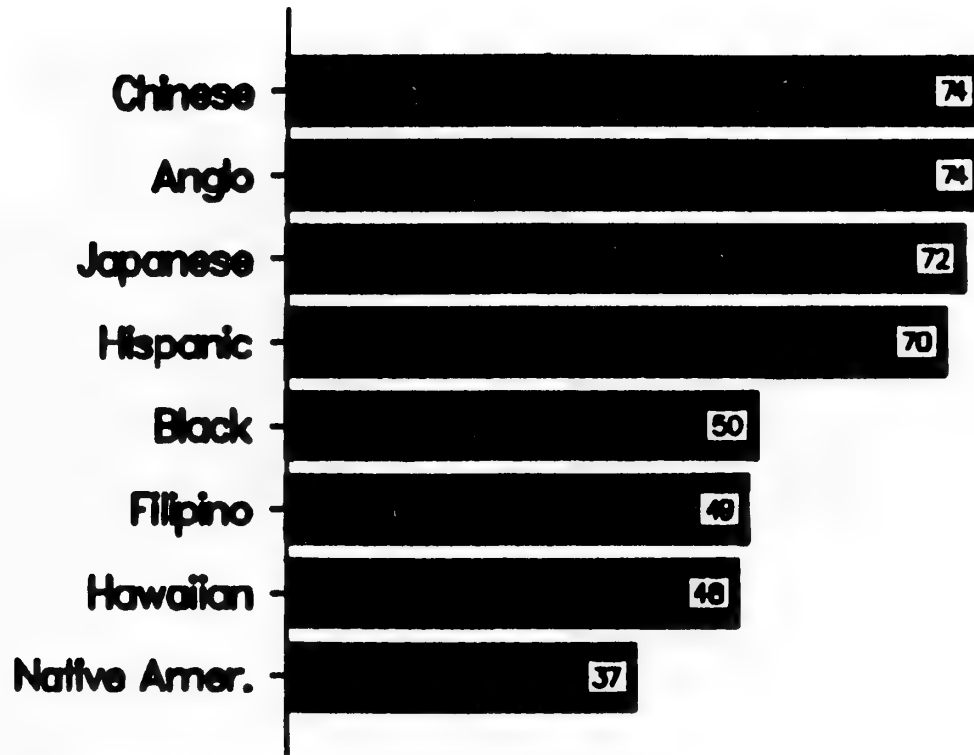


Figure IV-3

# Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81 (percent)

## Breast, Female

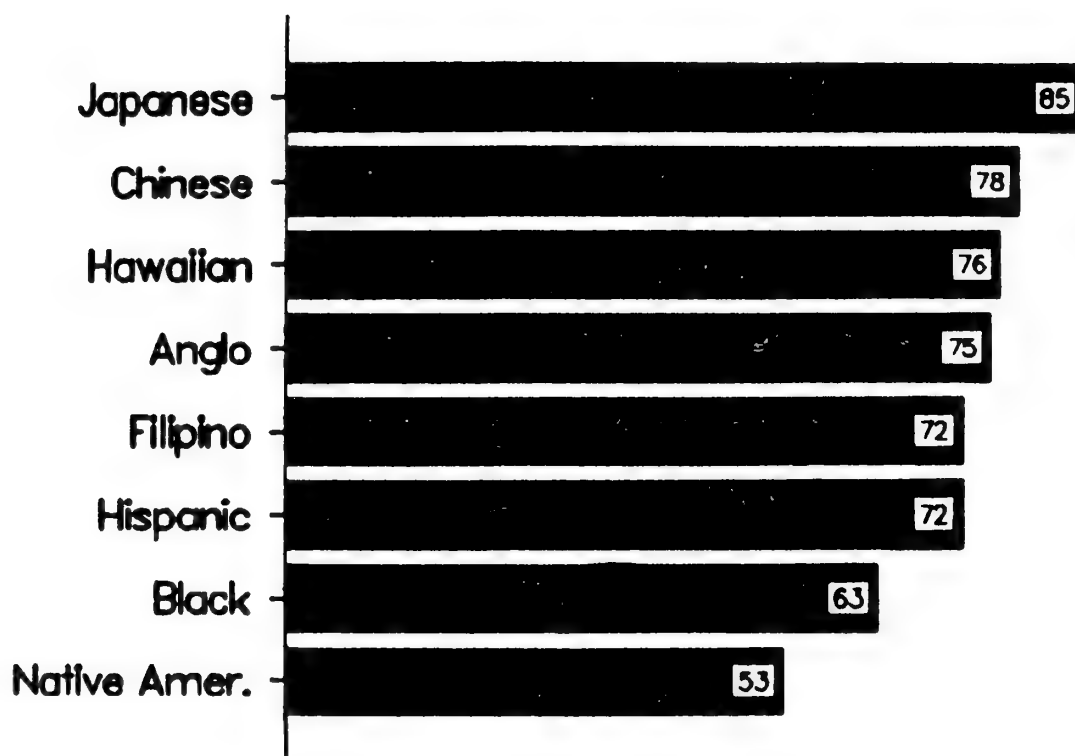




Figure IV-4

# Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81 (percent)

## Cervix Uteri

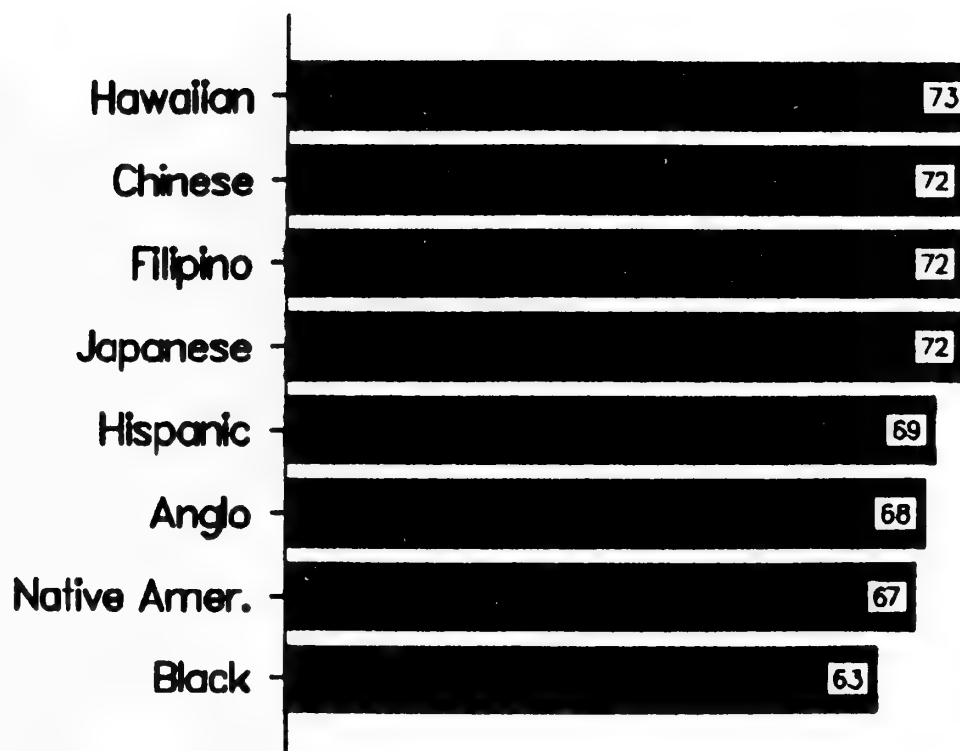


Figure IV-5

# Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81 (percent)

## Colon

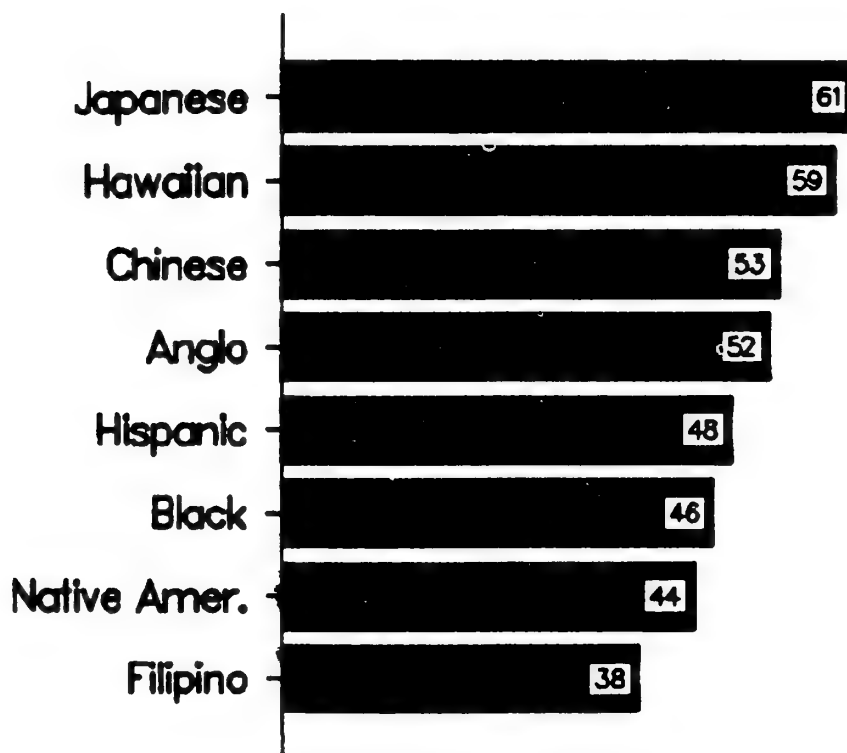


Figure IV-6

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Colon and Rectum**

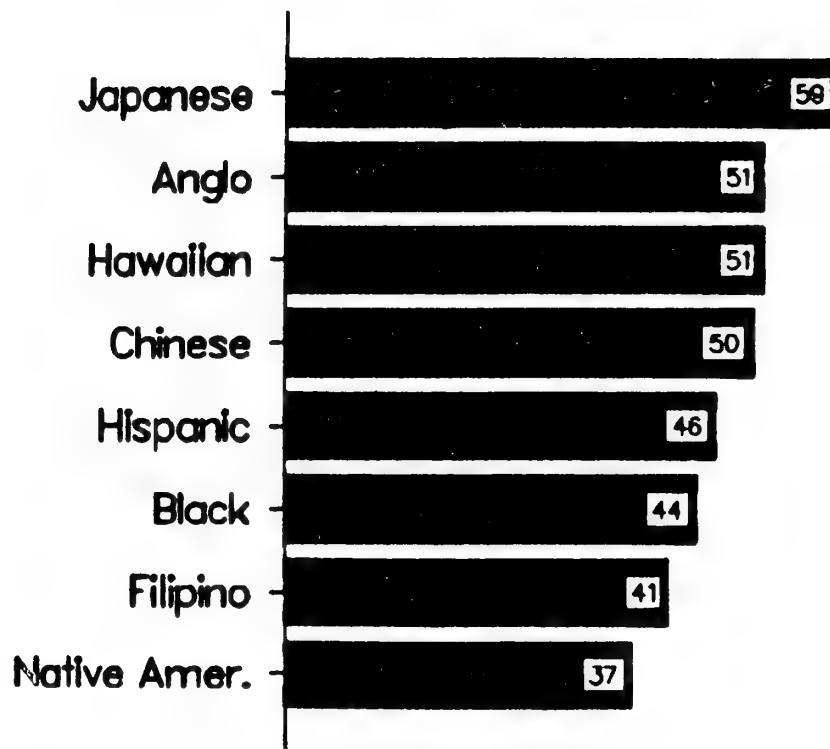


Figure IV-7

# Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81 (percent)

## Corpus Uteri

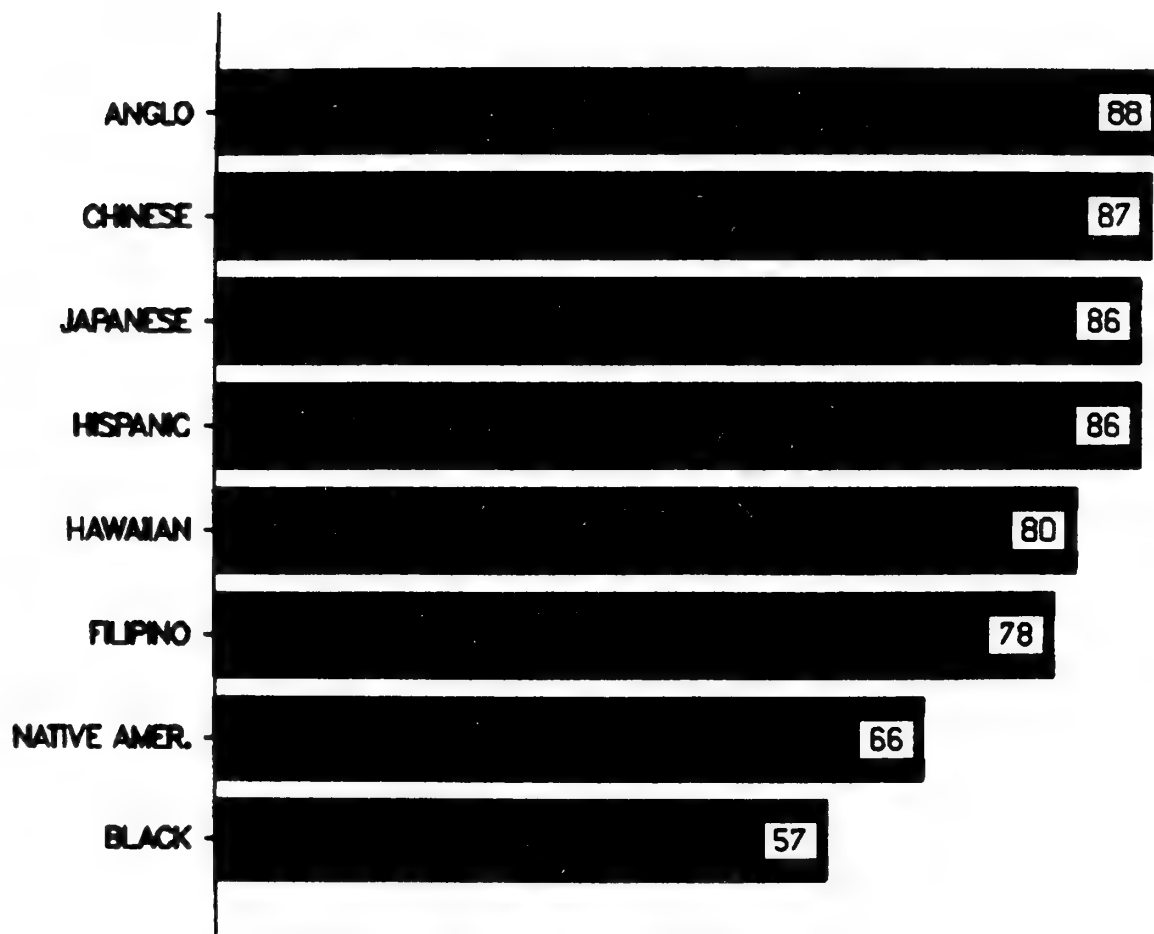


Figure IV-8

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Esophagus**

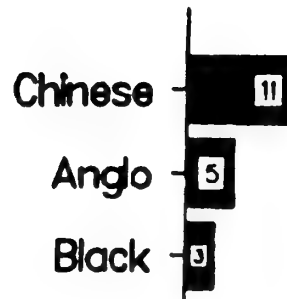


Figure IV-9

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Larynx**

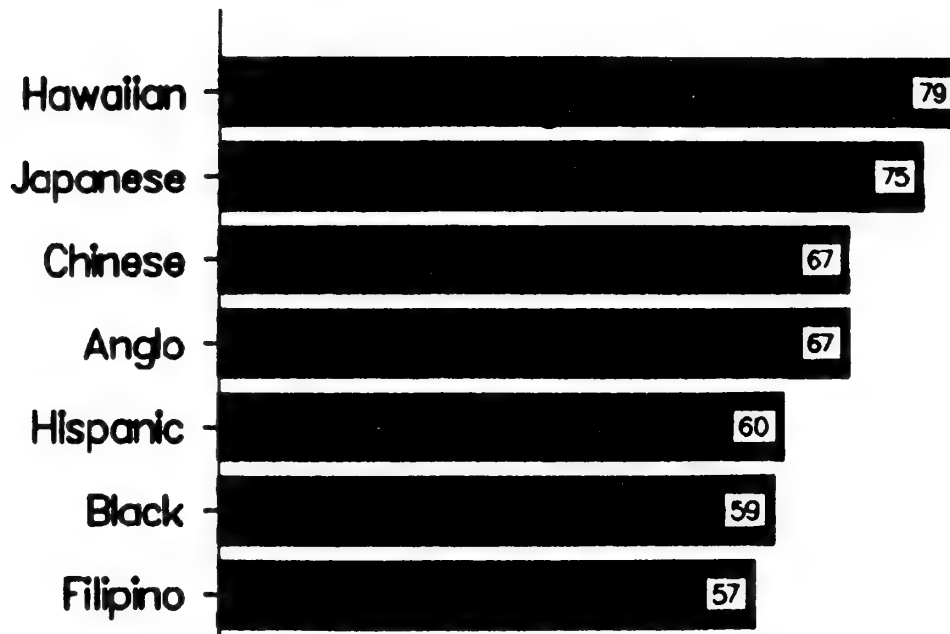


Figure IV-10

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Lung and Bronchus**

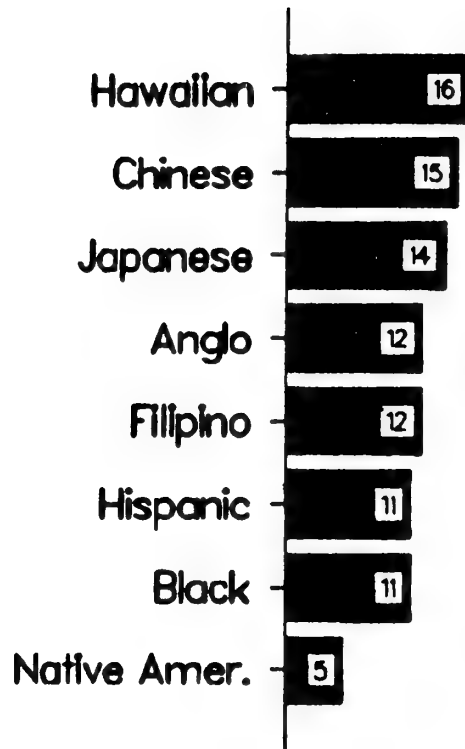


Figure IV-11

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Lung and Bronchus, Male**

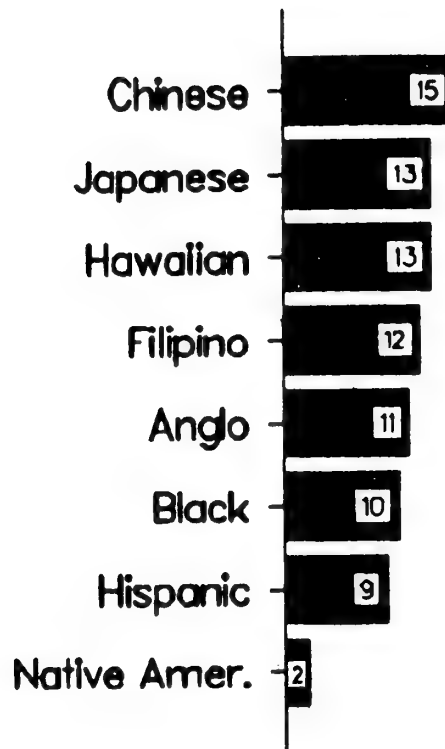




Figure IV-12

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Lung and Bronchus, Female**

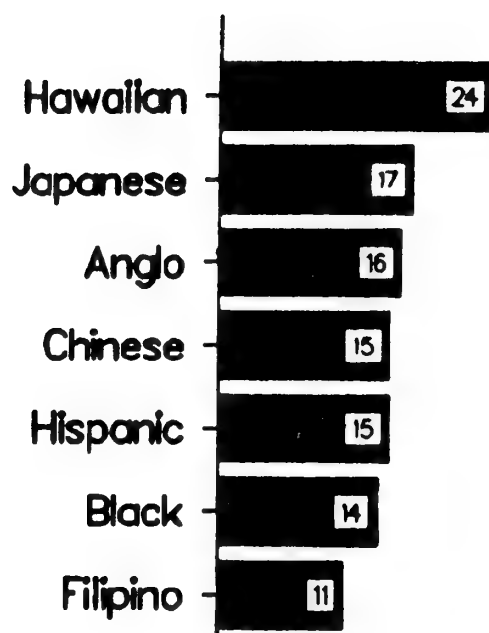


Figure IV-13

# Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81 (percent)

## Multiple Myeloma

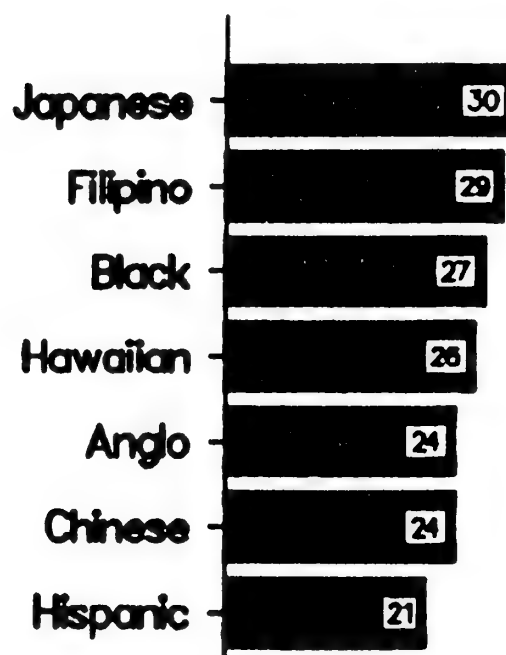


Figure IV-14

# Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81 (percent)

## Ovary

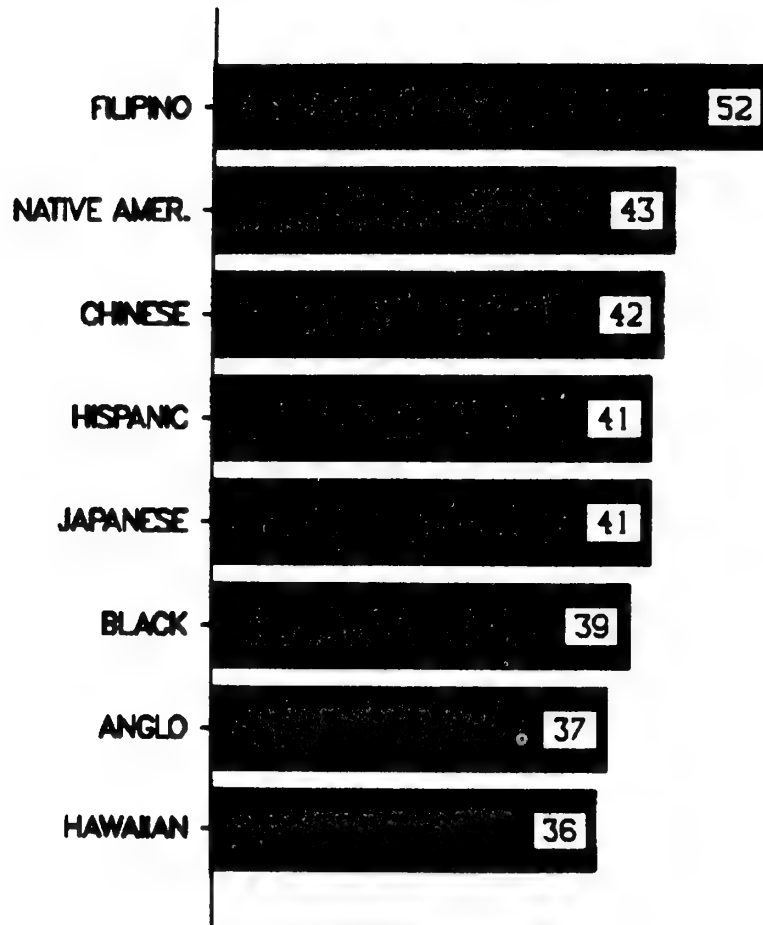


Figure IV-15

# Five-year Relative Survival Rates by Racial/Ethnic Group: 1973-81 (percent)

## Pancreas

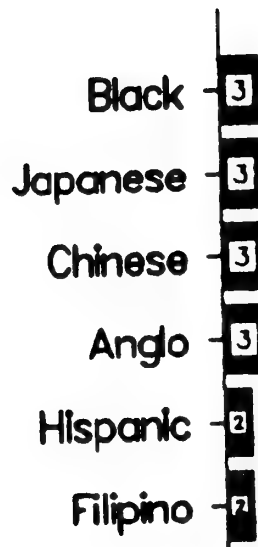


Figure IV-16

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Prostate**

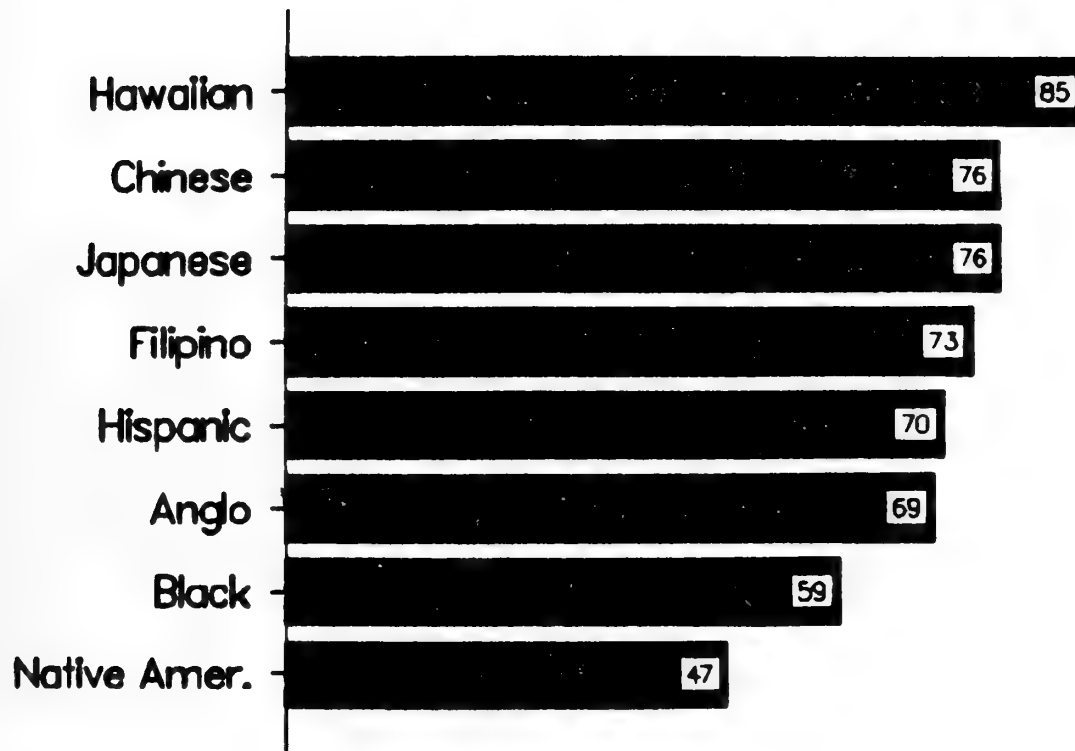


Figure IV-17

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

**Rectum**

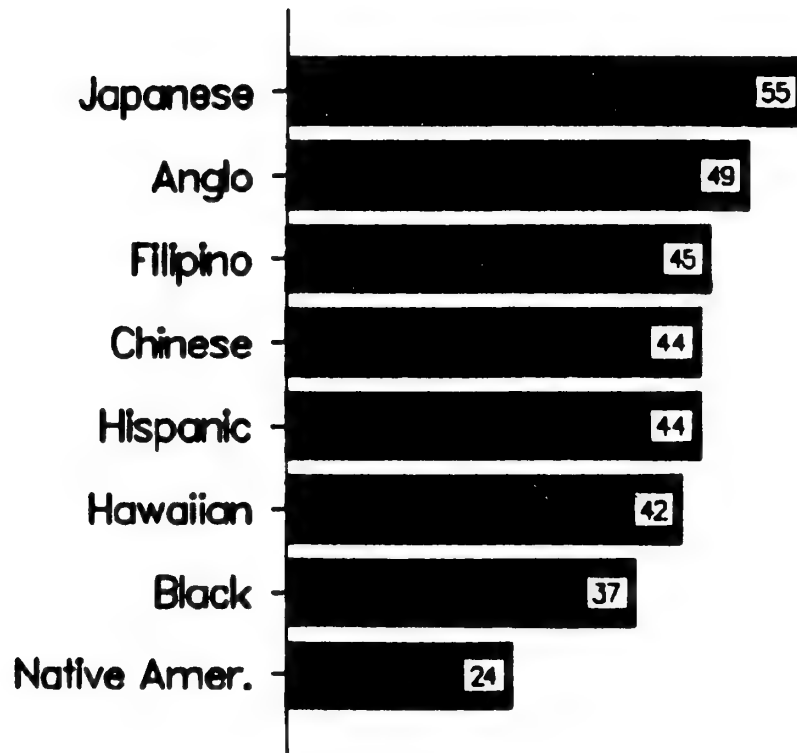
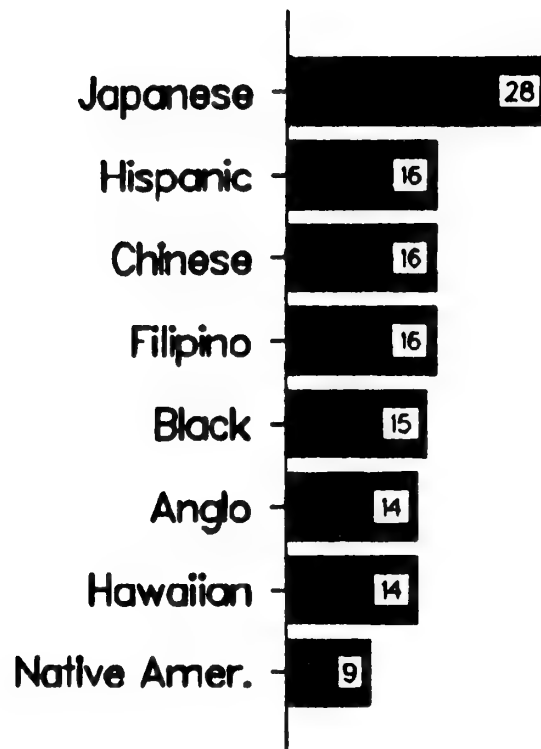


Figure IV-18

**Five-year Relative Survival Rates  
by Racial/Ethnic Group: 1973-81  
(percent)**

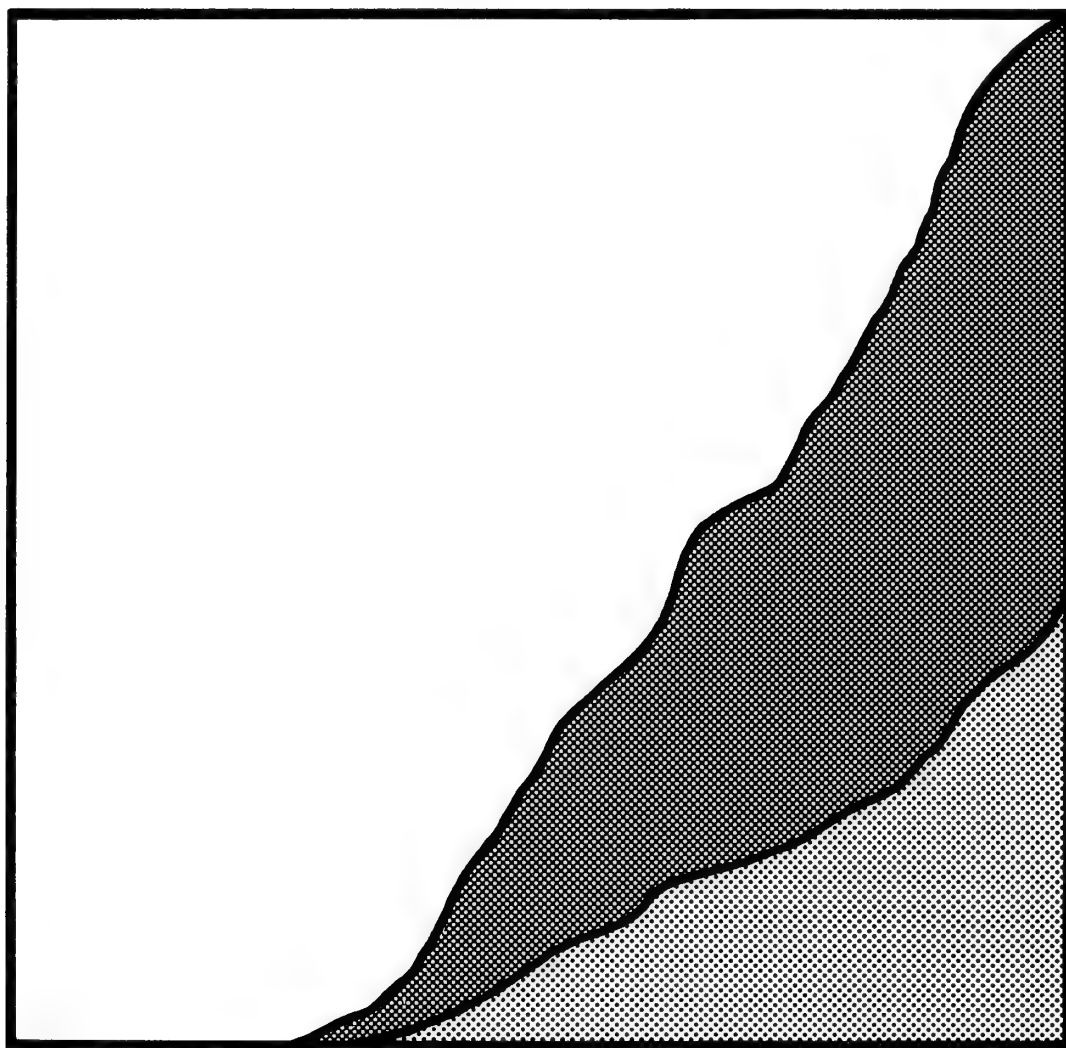
**Stomach**







**Section V.**  
**Survival Trends:**  
**Relative Survival By Successive**  
**Number Of Years After Diagnosis,**  
**1973-75 And 1976-81,**  
**For Blacks And Whites**





# TABLE OF CONTENTS

## SECTION V. SURVIVAL TRENDS: RELATIVE SURVIVAL BY SUCCESSIVE NUMBER OF YEARS AFTER DIAGNOSIS AND YEAR OF DIAGNOSIS, 1973-75 AND 1976-81, FOR BLACKS AND WHITES

	Page
Discussion .....	153
<i>Relative Survival Rates by Successive Number of Years After Diagnosis and Year of Diagnosis, SEER Program: 1973-81</i>	
Figure V-1. All Sites Combined, Black .....	154
Figure V-2. All Sites Combined, White .....	155
Figure V-3. Bladder, Black .....	156
Figure V-4. Bladder, White .....	157
Figure V-5. Breast, Black Female .....	158
Figure V-6. Breast, White Female .....	159
Figure V-7. Cervix Uteri, Black .....	160
Figure V-8. Cervix Uteri, White .....	161
Figure V-9. Colon, Black .....	162
Figure V-10. Colon, White .....	163
Figure V-11. Colon and Rectum, Black .....	164
Figure V-12. Colon and Rectum, White .....	165
Figure V-13. Corpus Uteri, Black .....	166
Figure V-14. Corpus Uteri, White .....	167
Figure V-15. Esophagus, Black .....	168
Figure V-16. Esophagus, White .....	169
Figure V-17. Larynx, Black .....	170
Figure V-18. Larynx, White .....	171
Figure V-19. Lung and Bronchus, Black Male .....	172
Figure V-20. Lung and Bronchus, White Male .....	173
Figure V-21. Lung and Bronchus, Black Female .....	174
Figure V-22. Lung and Bronchus, White Female .....	175
Figure V-23. Multiple Myeloma, Black .....	176
Figure V-24. Multiple Myeloma, White .....	177
Figure V-25. Ovary, Black .....	178
Figure V-26. Ovary, White .....	179
Figure V-27. Pancreas, Black .....	180
Figure V-28. Pancreas, White .....	181
Figure V-29. Prostate, Black .....	182
Figure V-30. Prostate, White .....	183
Figure V-31. Rectum, Black .....	184
Figure V-32. Rectum, White .....	185
Figure V-33. Stomach, Black .....	186
Figure V-34. Stomach, White .....	187



## **Section V. Survival Trends: Relative Survival by Successive Number of Years After Diagnosis and Year of Diagnosis, 1973-75 and 1976-81, for Blacks and Whites**

### **Discussion**

In this section relative cancer survival rates for blacks and whites are presented by the number of years after a diagnosis of cancer is made. These rates cover two time periods, 1973-75 and 1976-81. The data are derived from SEER reports.

This section contains a set of line graphs comparing survival patterns for primary cancer sites from two time periods. Black and white survival patterns are shown on separate graphs. The first two graphs present overall cancer survival patterns for blacks and whites. These are followed by a series of graphs showing black and white patterns for primary cancer sites.

### **Highlights**

- The overall cancer survival pattern for blacks was virtually unchanged from 1973-75 to 1976-81. Blacks experienced similar survival rates each year after diagnosis for the two time periods. Whites, however, had slightly higher survival rates in 1976-81 than in 1973-75 for each year after diagnosis.
- Blacks experienced some increase in cancer survival from 1973-75 to 1976-81 for cancers of the bladder, esophagus, colon, lung and bronchus (female), ovary, prostate, rectum, and stomach.

Figure V-1

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**All Sites Combined  
Black**

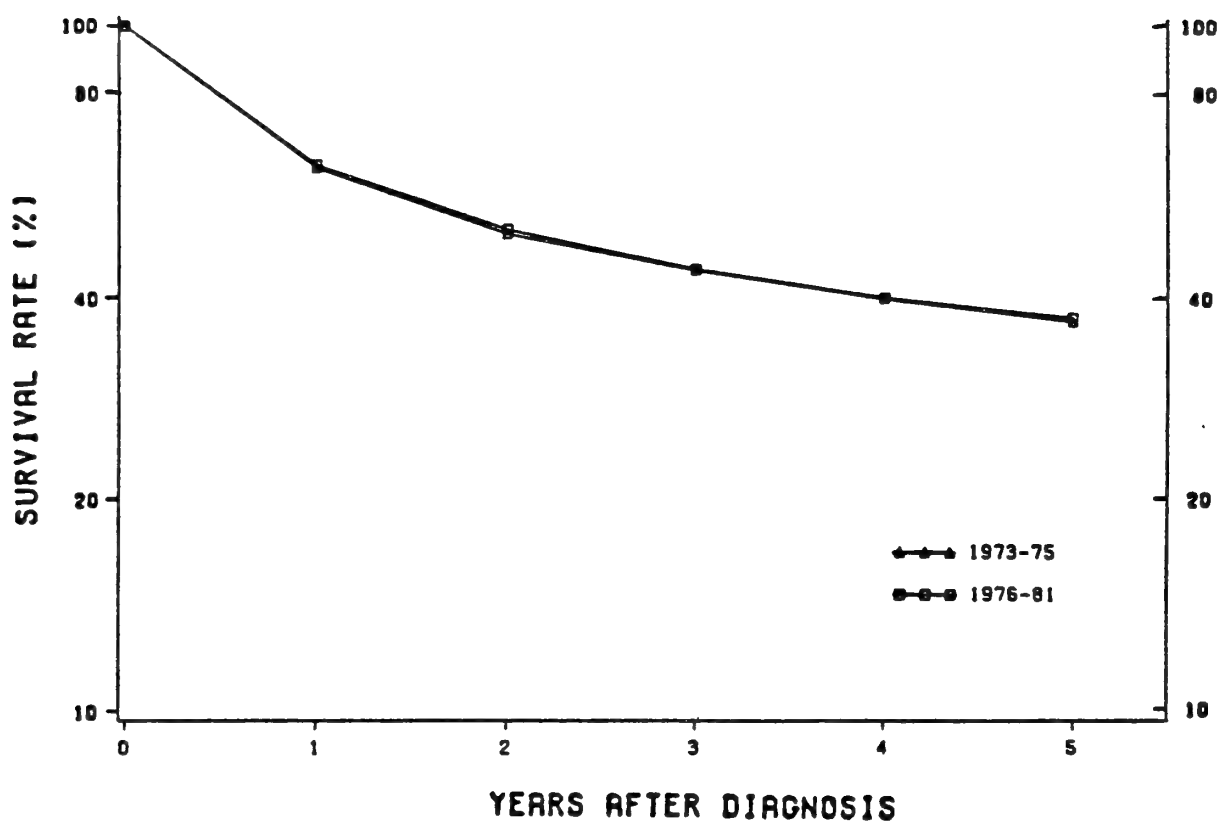


Figure V-2

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**All Sites Combined  
White**

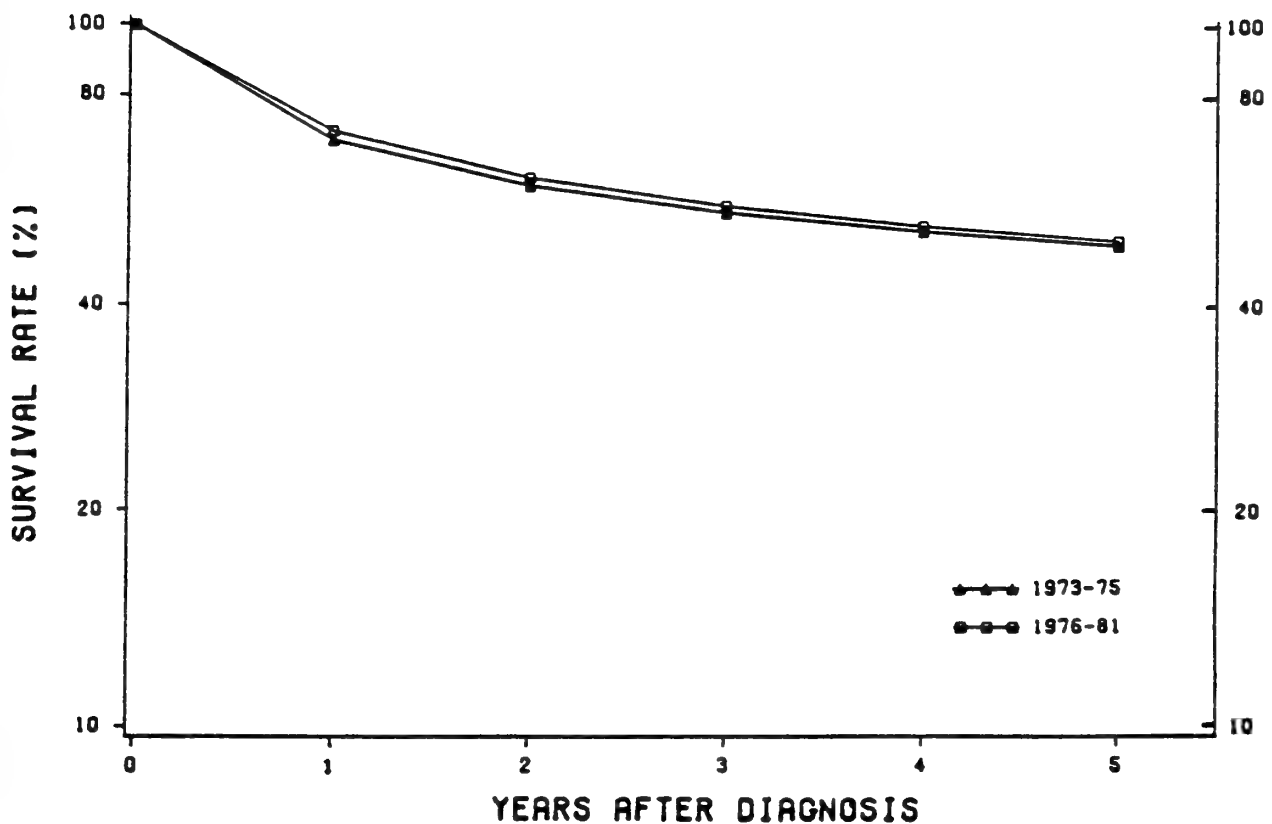


Figure V-3

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Bladder  
Black**

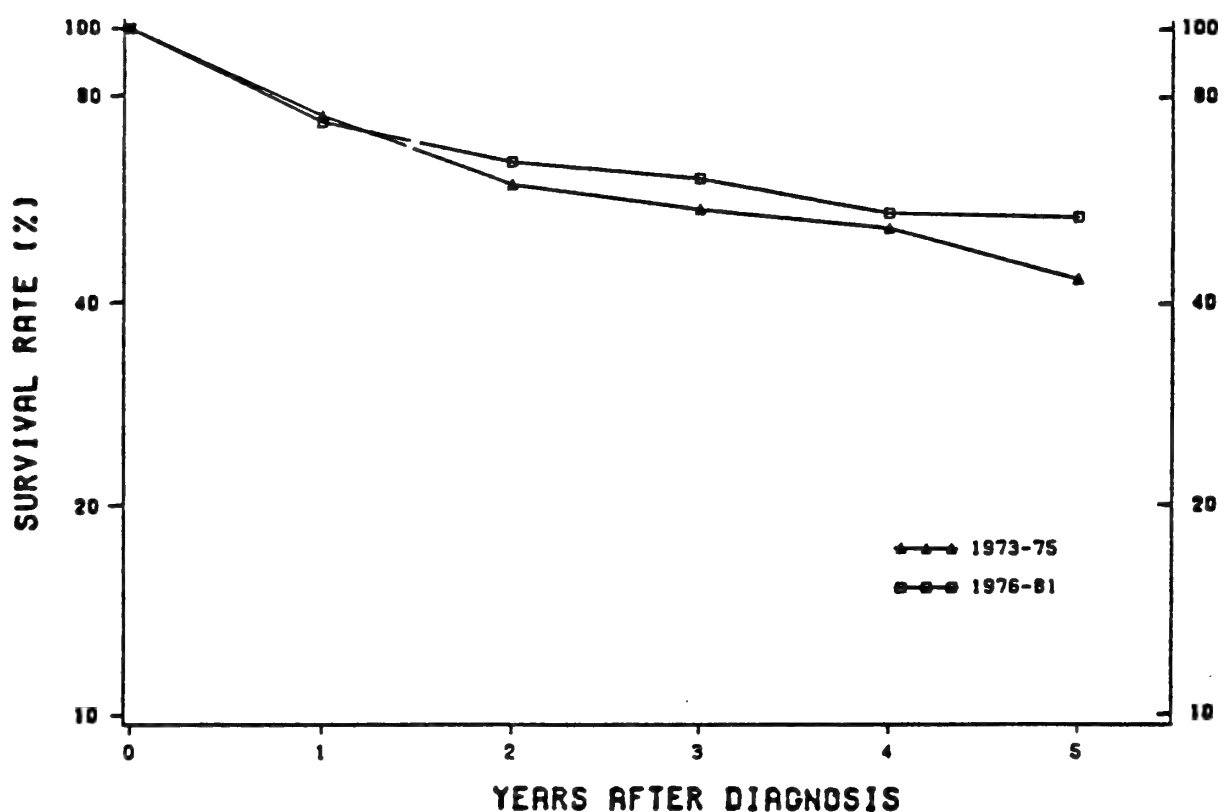




Figure V-4

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Bladder  
White**

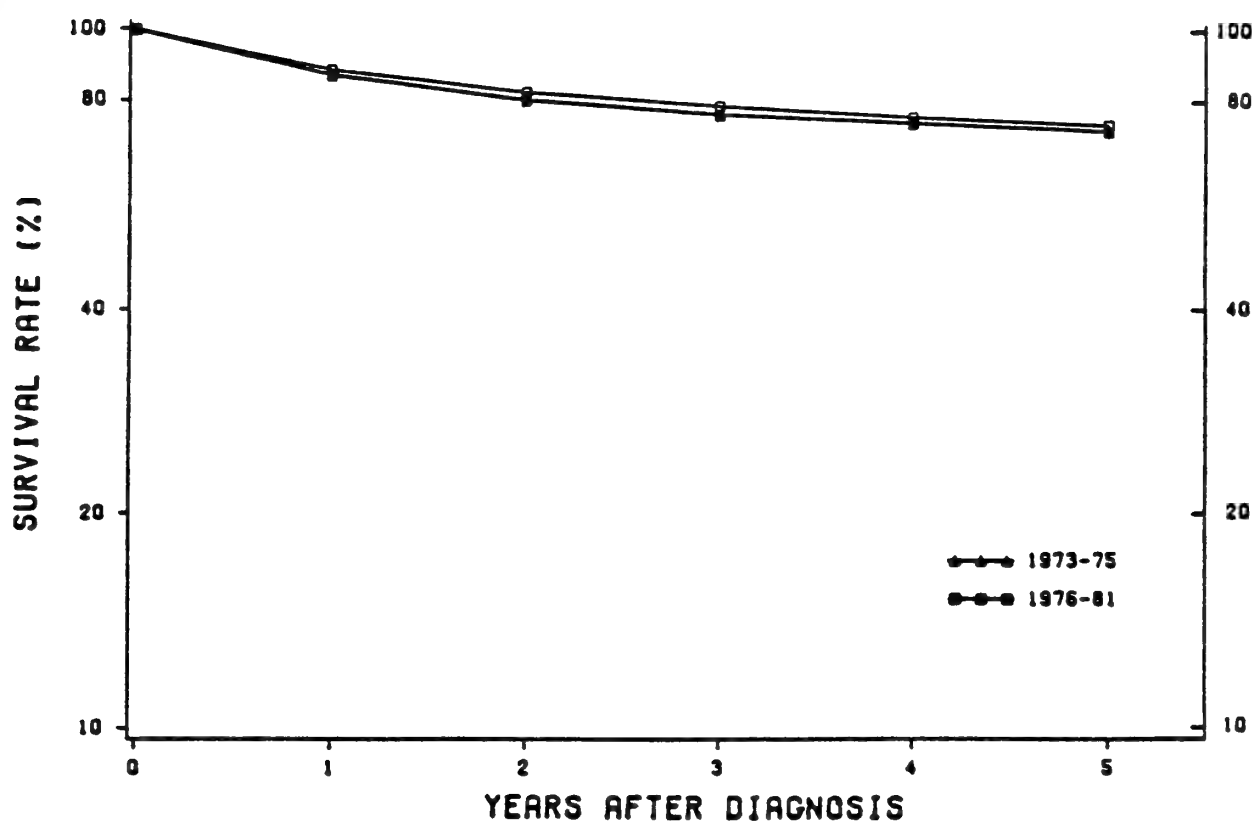


Figure V-5

# Relative Survival Rates by Successive Number of Years After Diagnosis and Year of Diagnosis, SEER Program: 1973-81

## Breast Black, Female

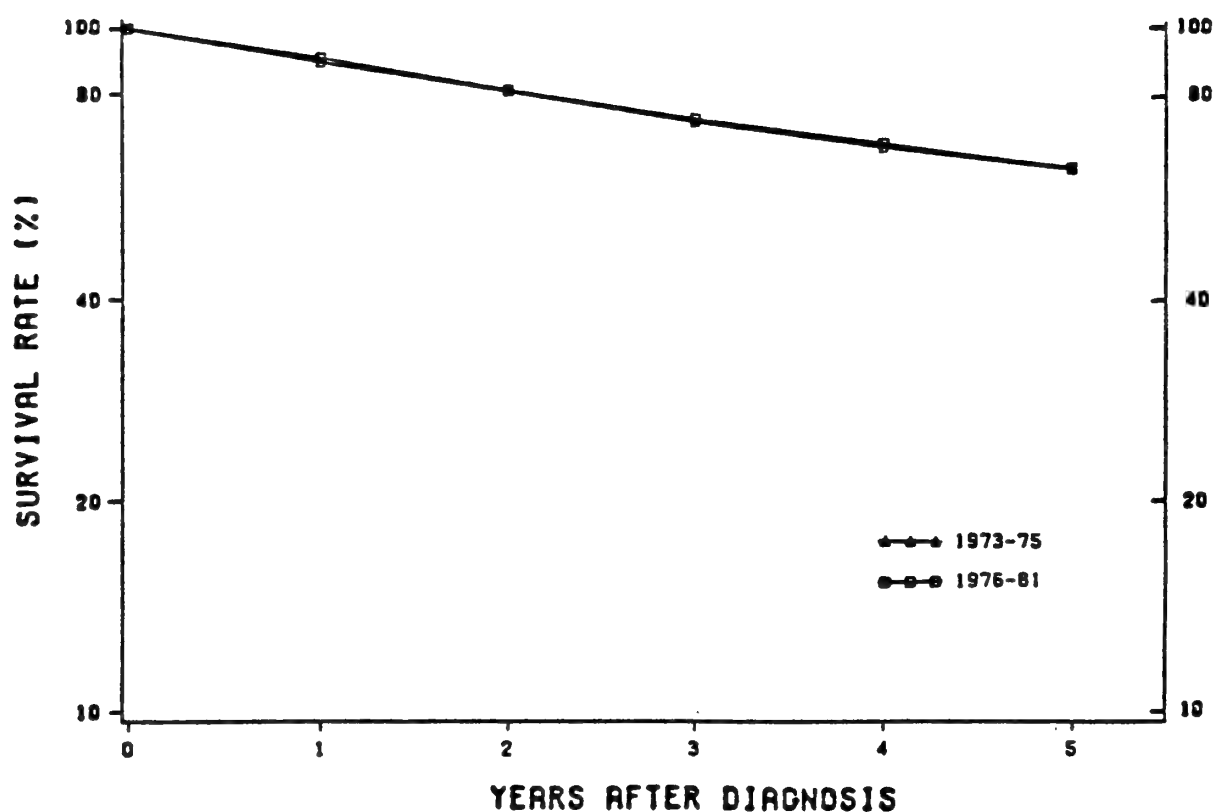


Figure V-6

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Breast  
White, Female**

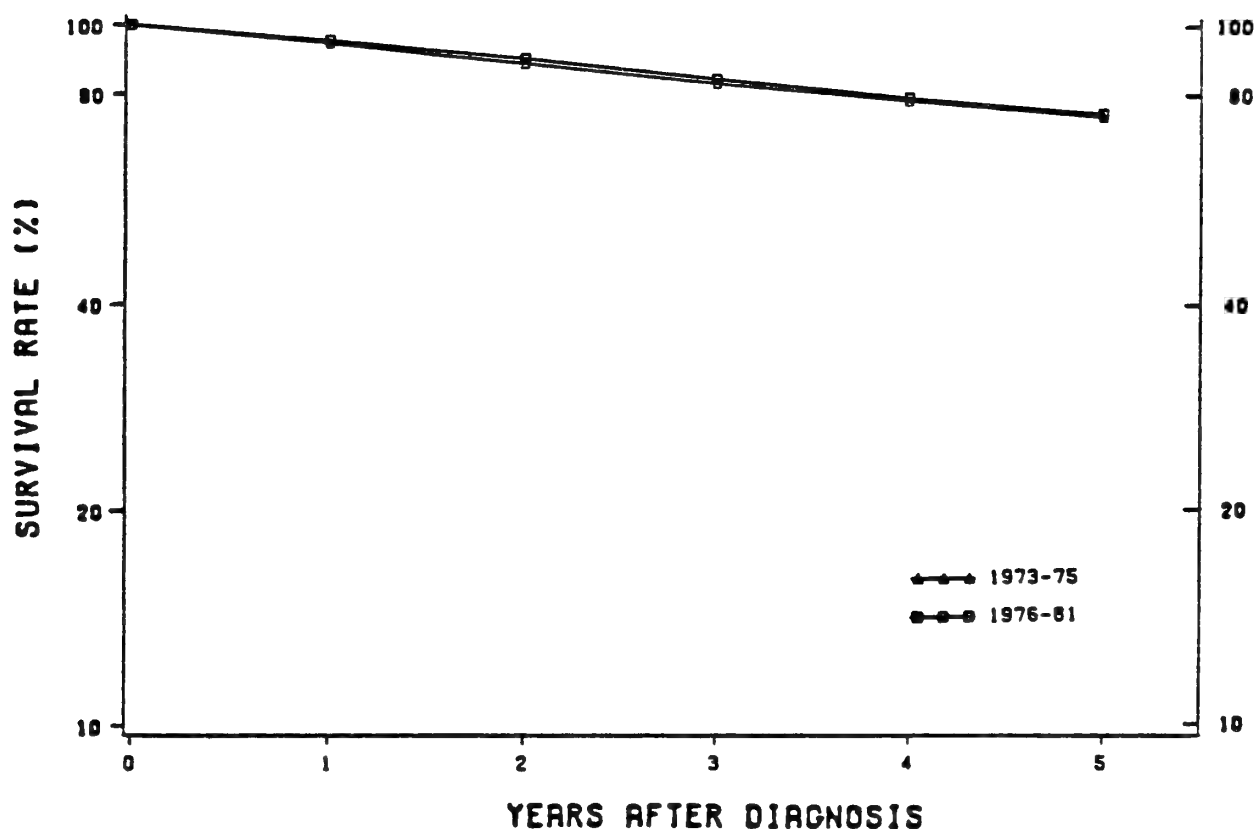


Figure V-7

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Cervix Uteri  
Black**

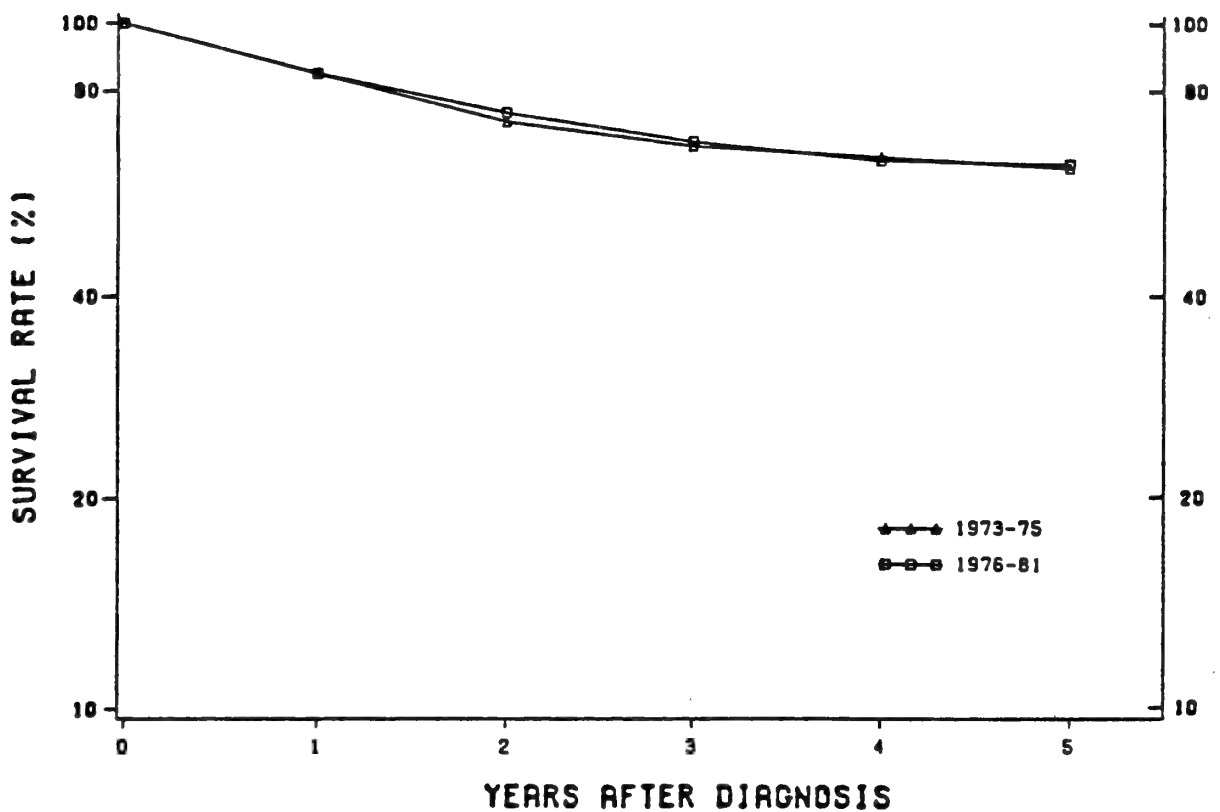


Figure V-8

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Cervix Uteri  
White**

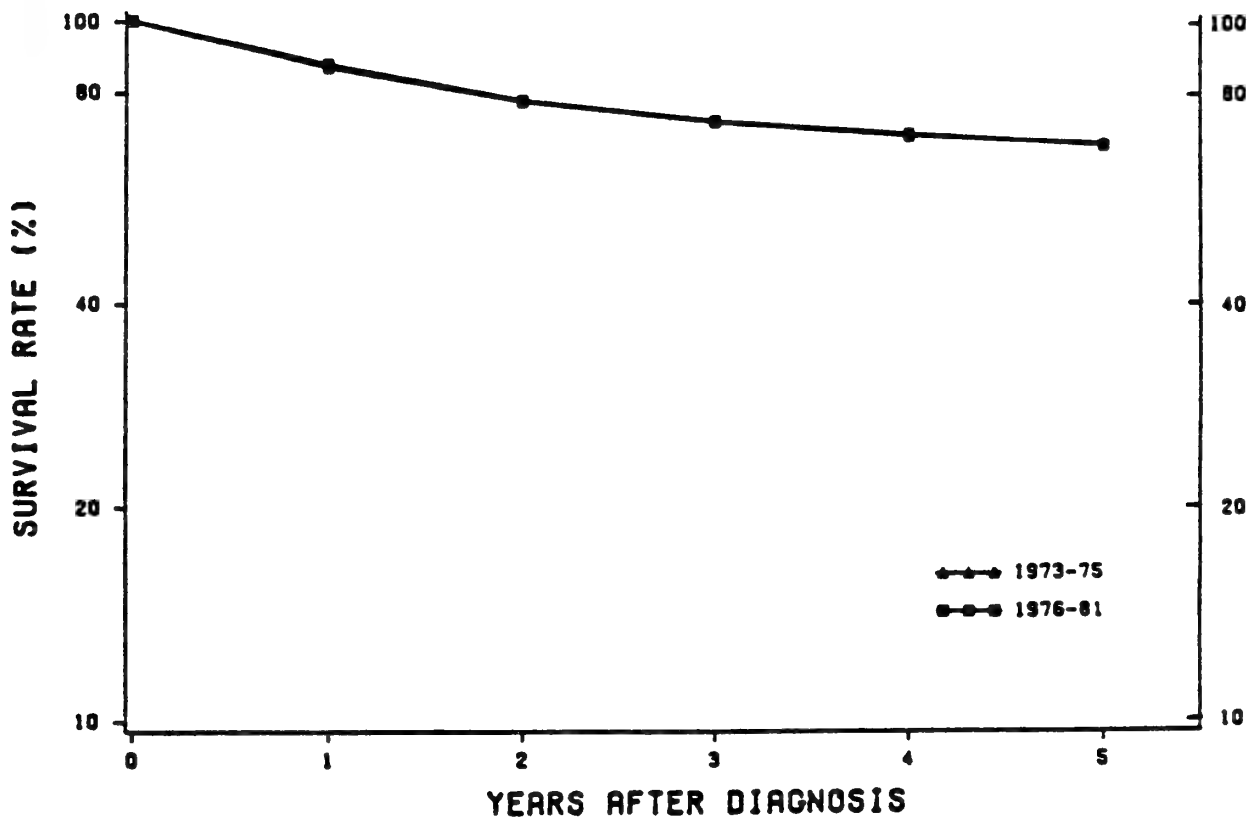


Figure V-9

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Colon  
Black**

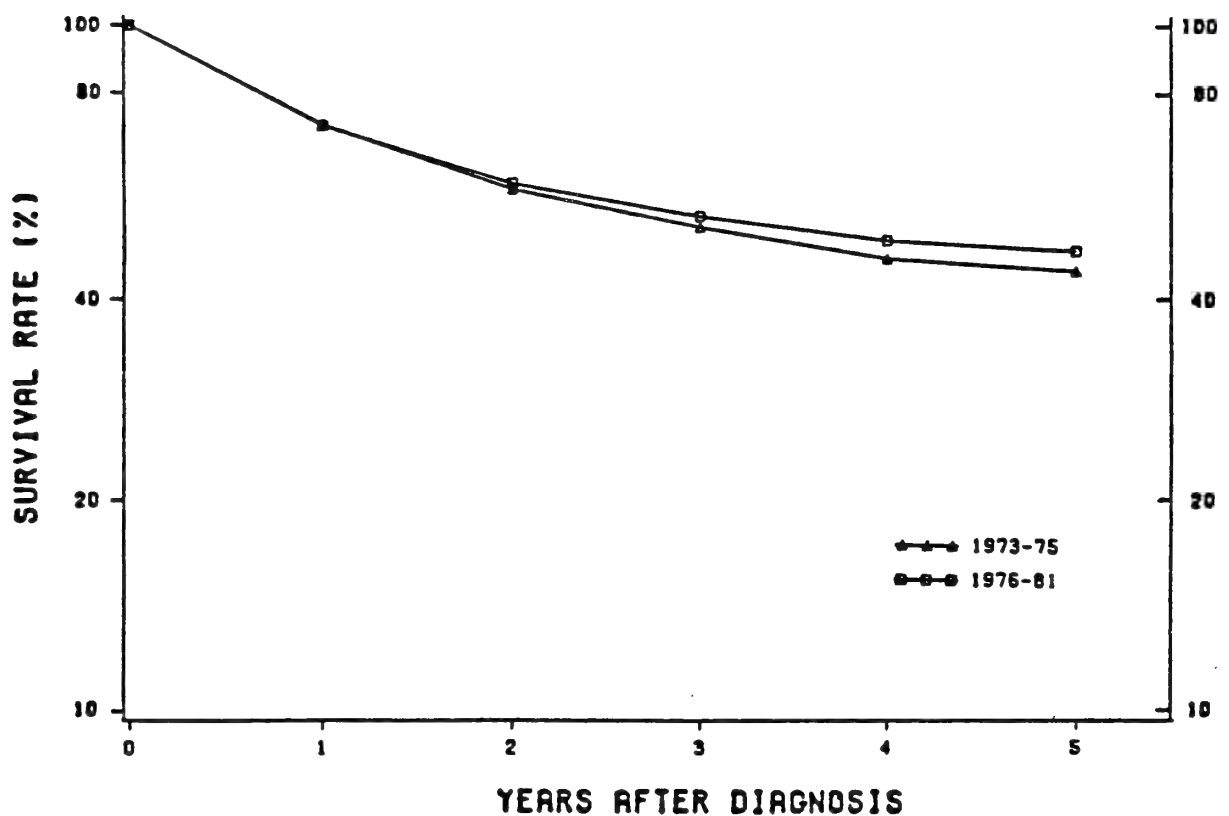


Figure V-10

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Colon  
White**

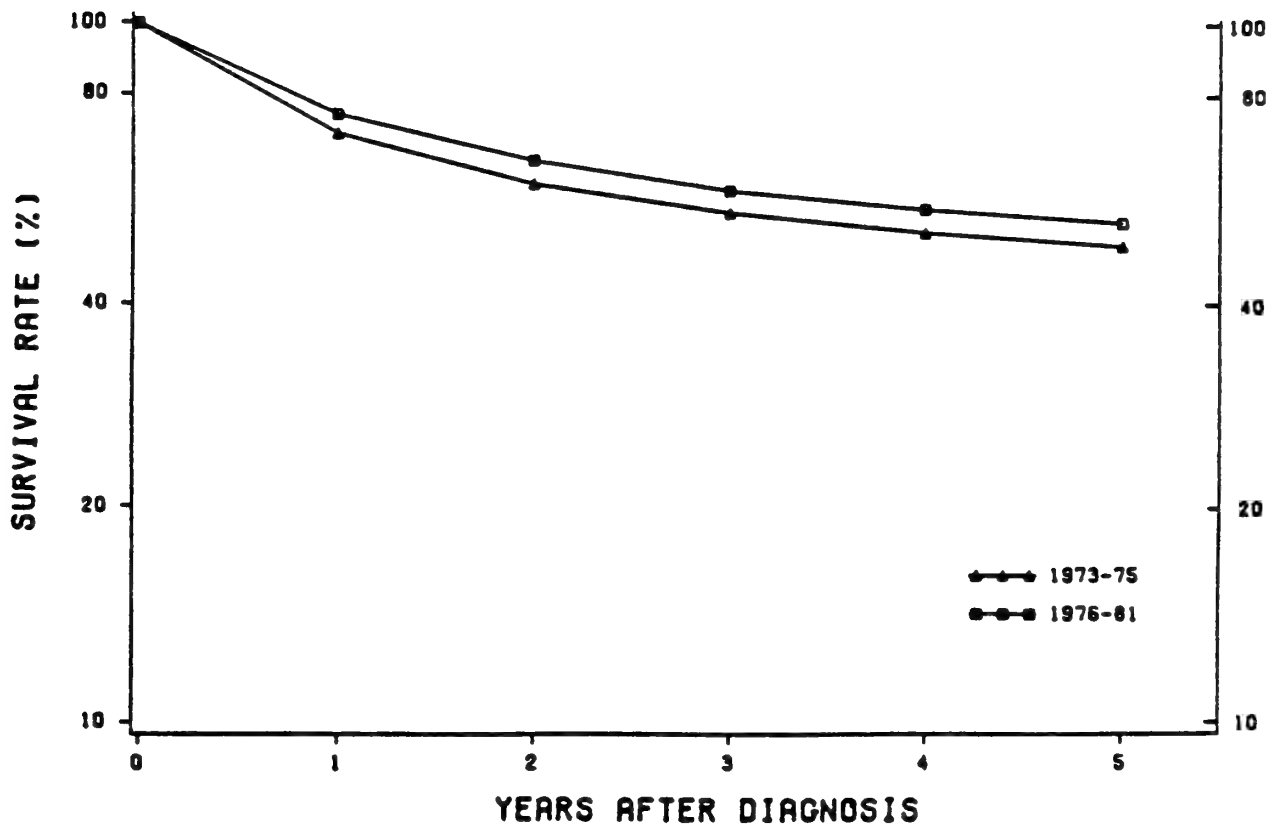


Figure V-11

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Colon and Rectum  
Black**

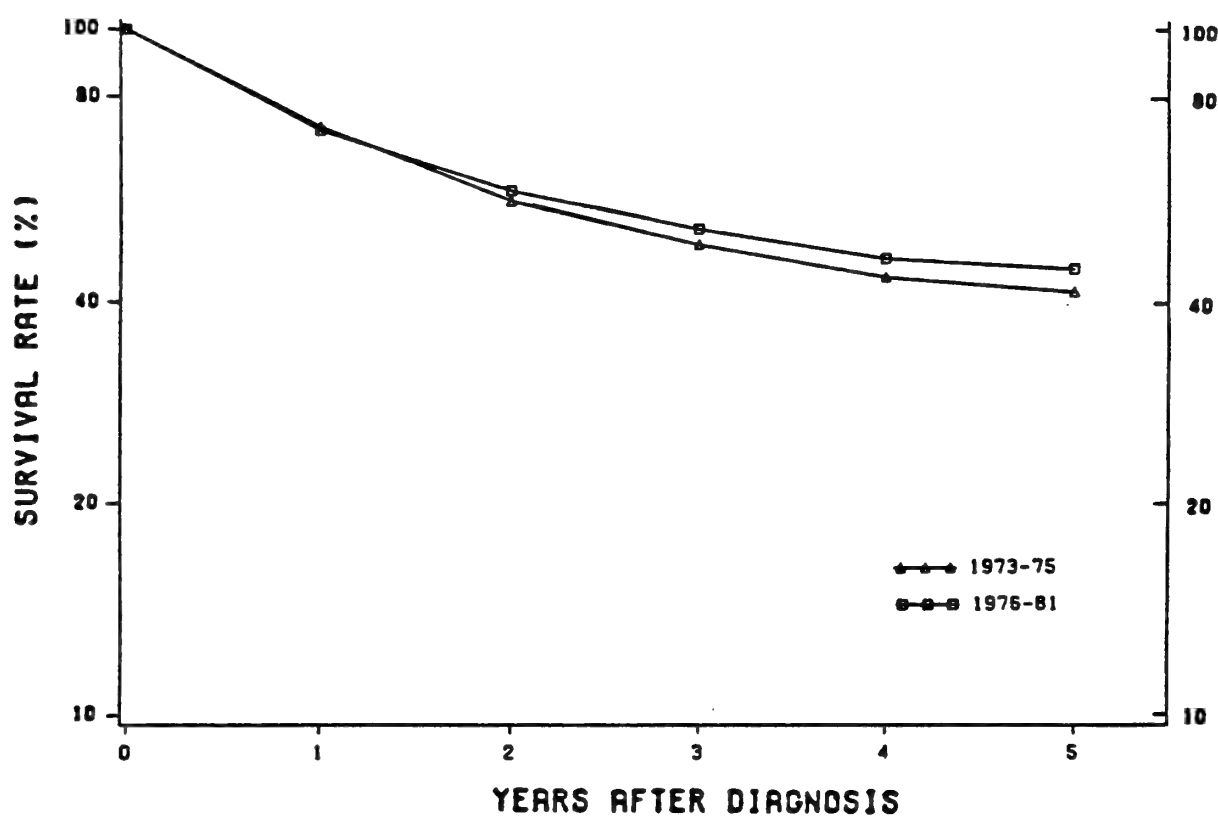




Figure V-12

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Colon and Rectum  
White**

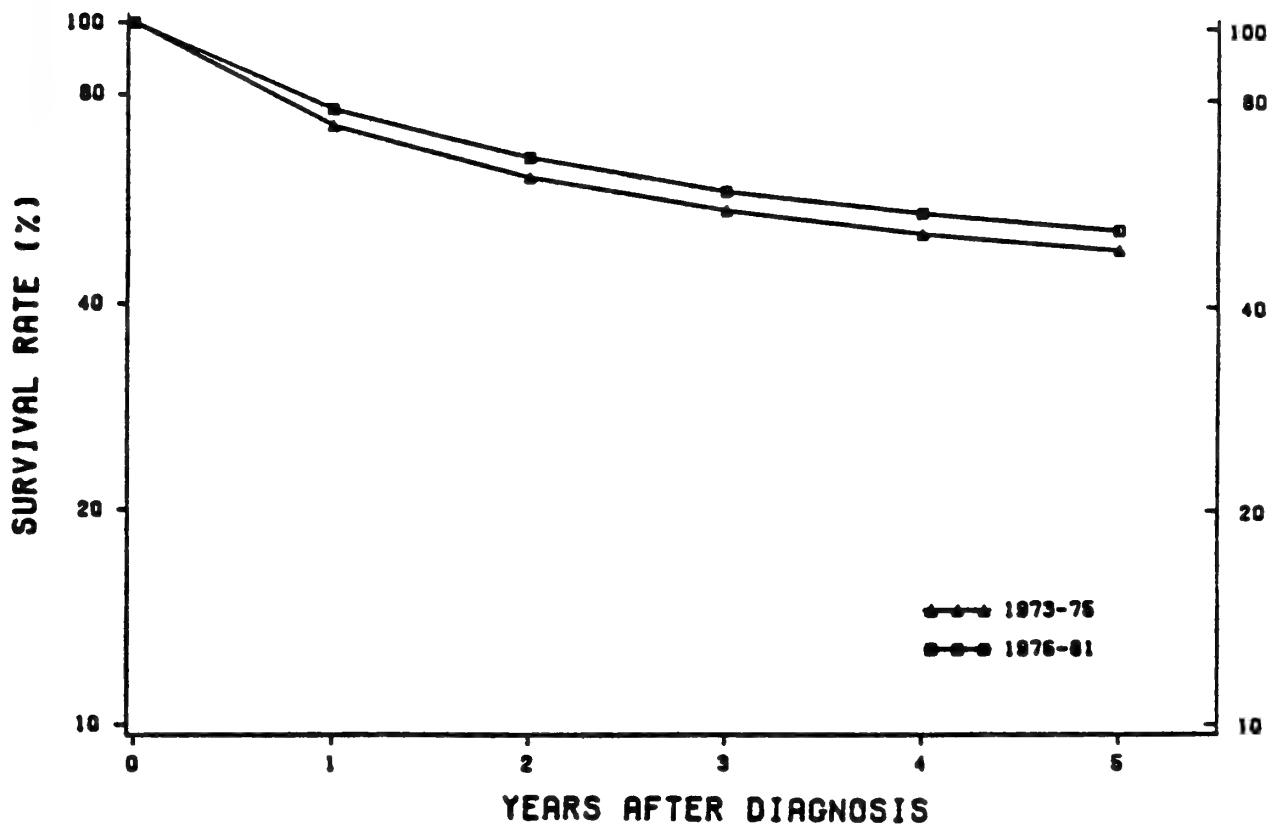
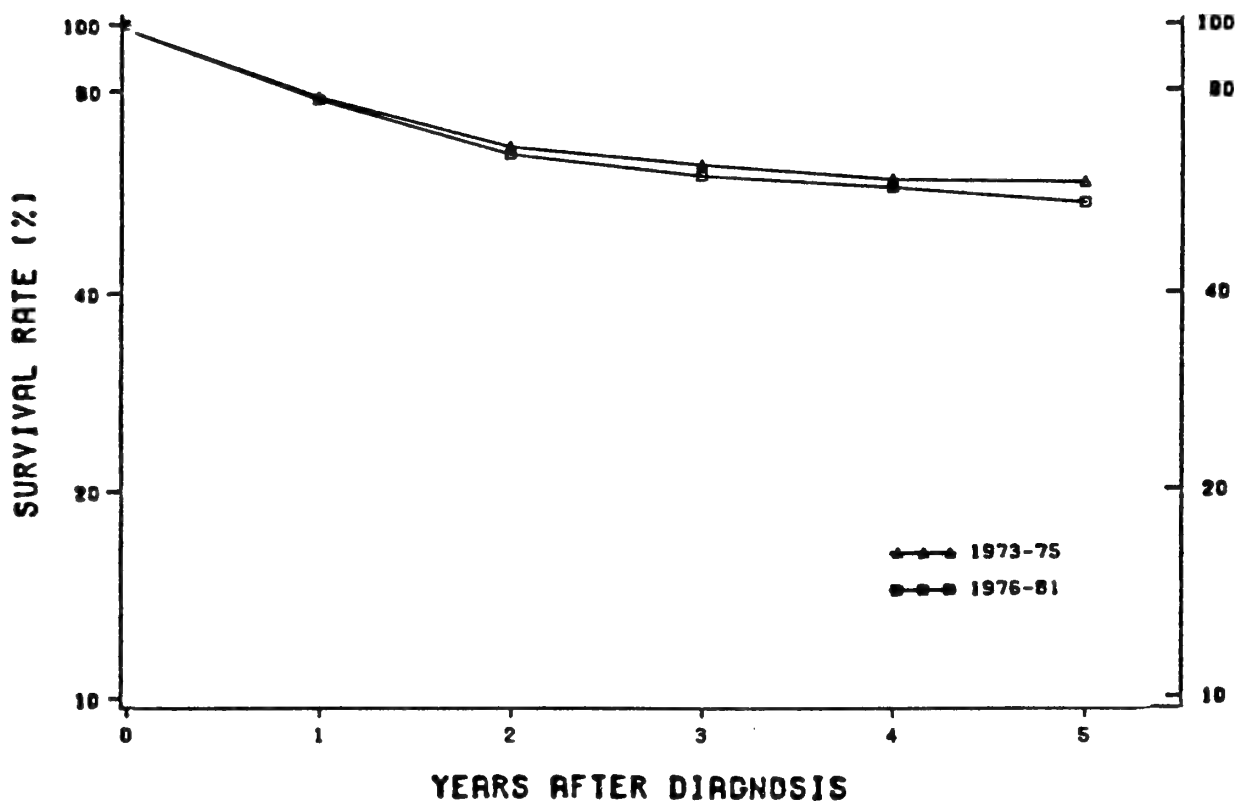


Figure V-13

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Corpus Uteri  
Black**



NOTE: BLACK FEMALES

Figure V-14

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Corpus Uteri  
White**

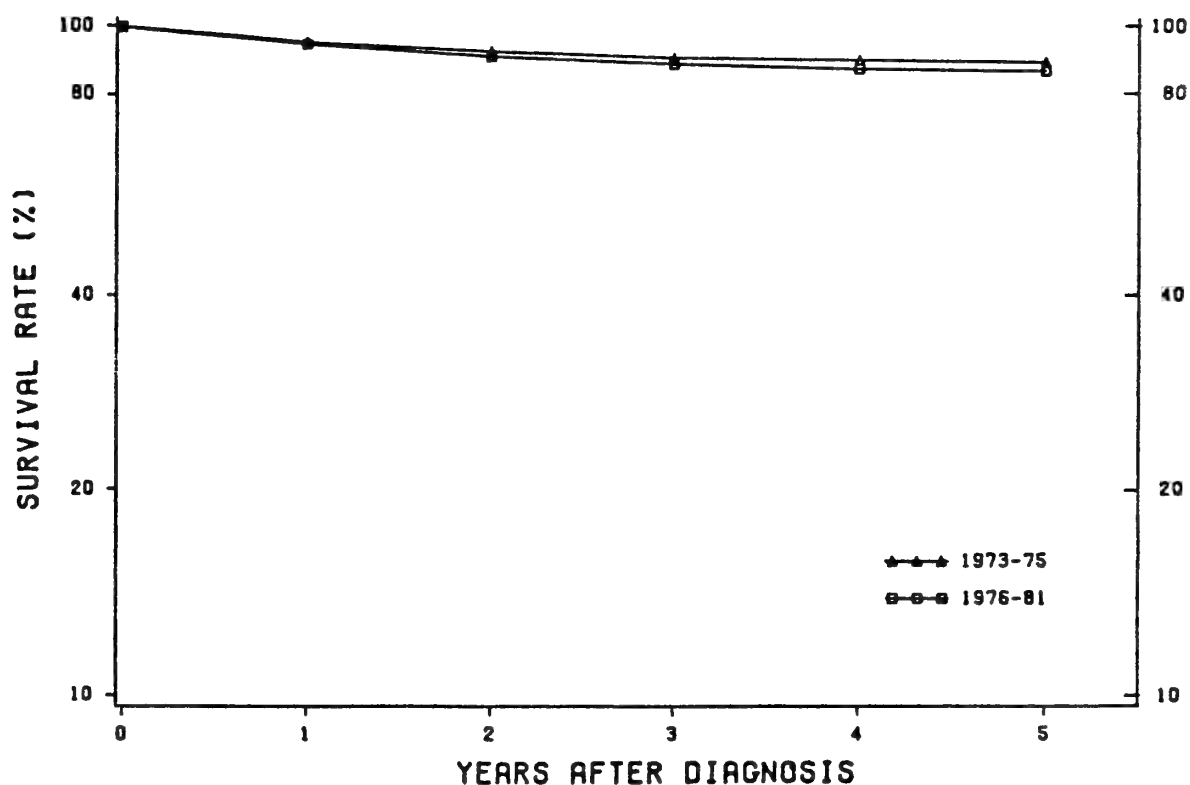


Figure V-15

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Esophagus  
Black**

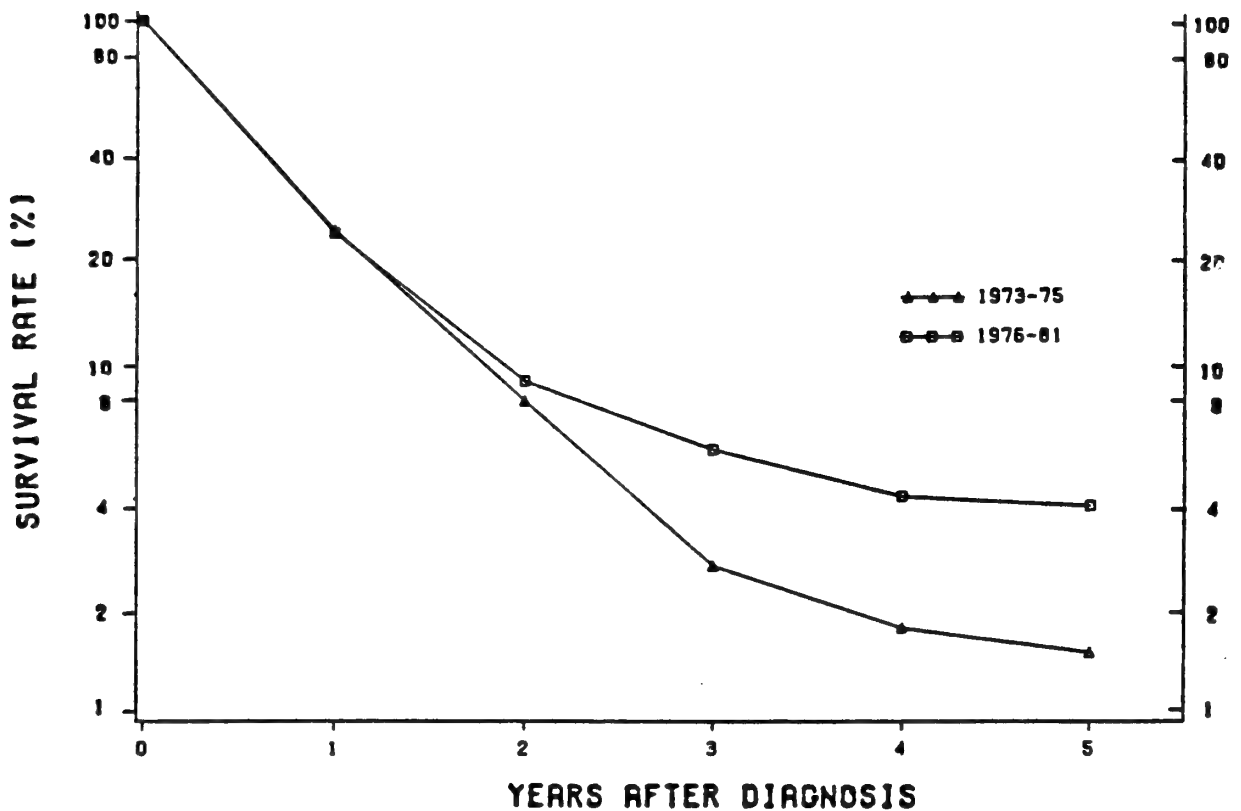


Figure V-16

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Esophagus  
White**

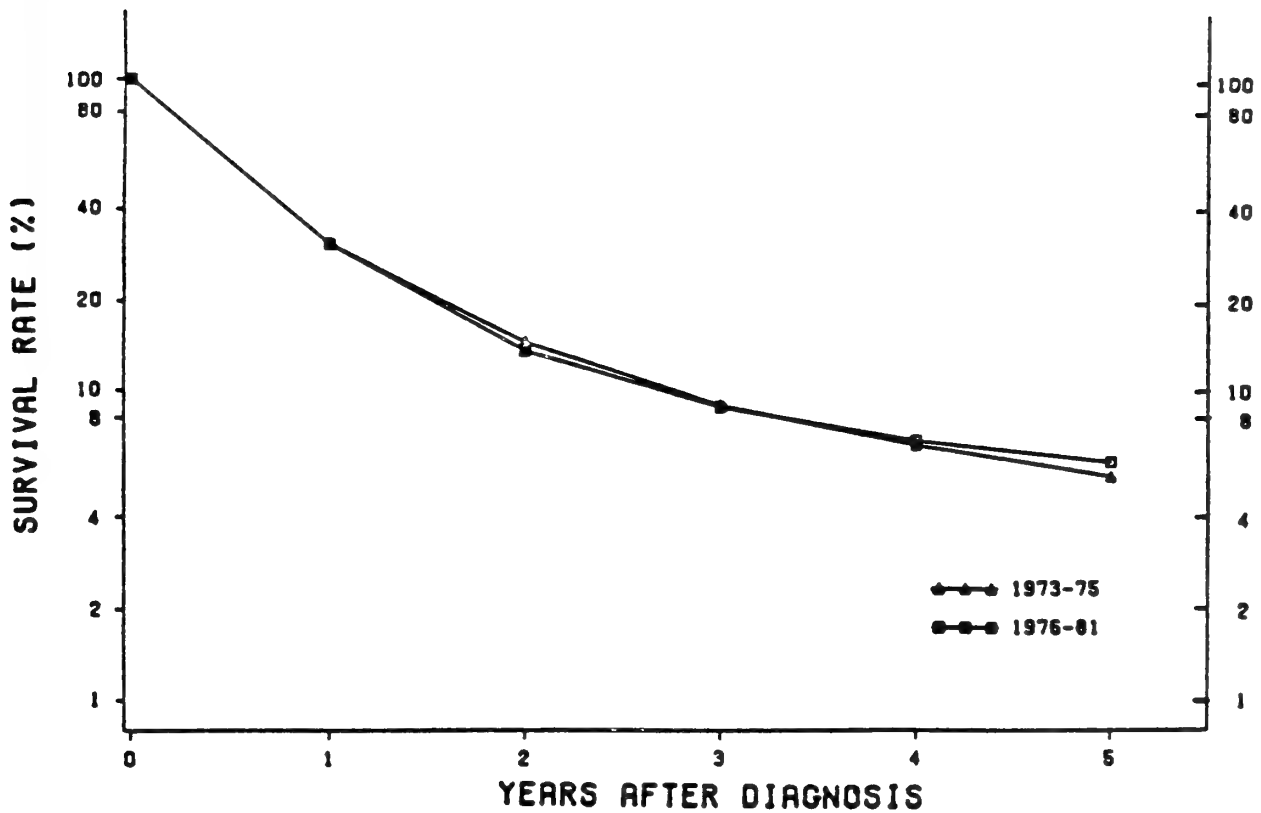


Figure V-17

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Larynx  
Black**

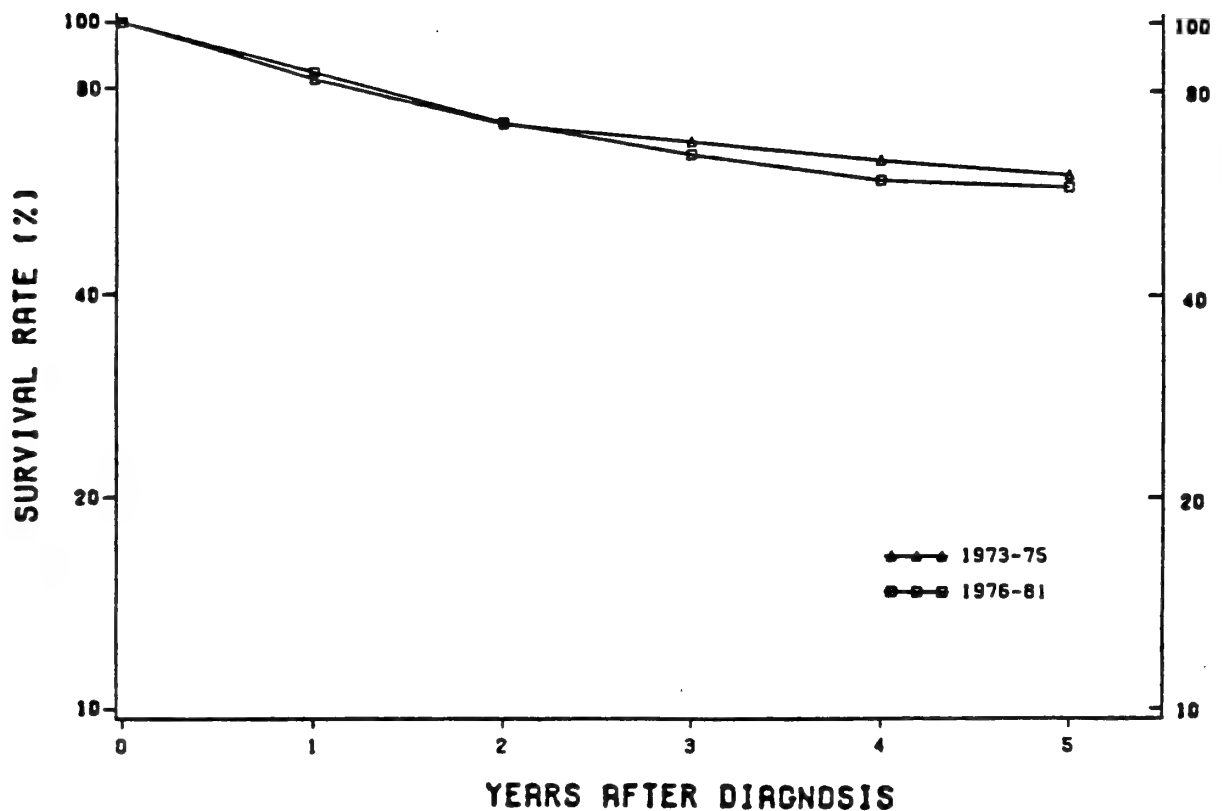


Figure V-18

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Larynx  
White**

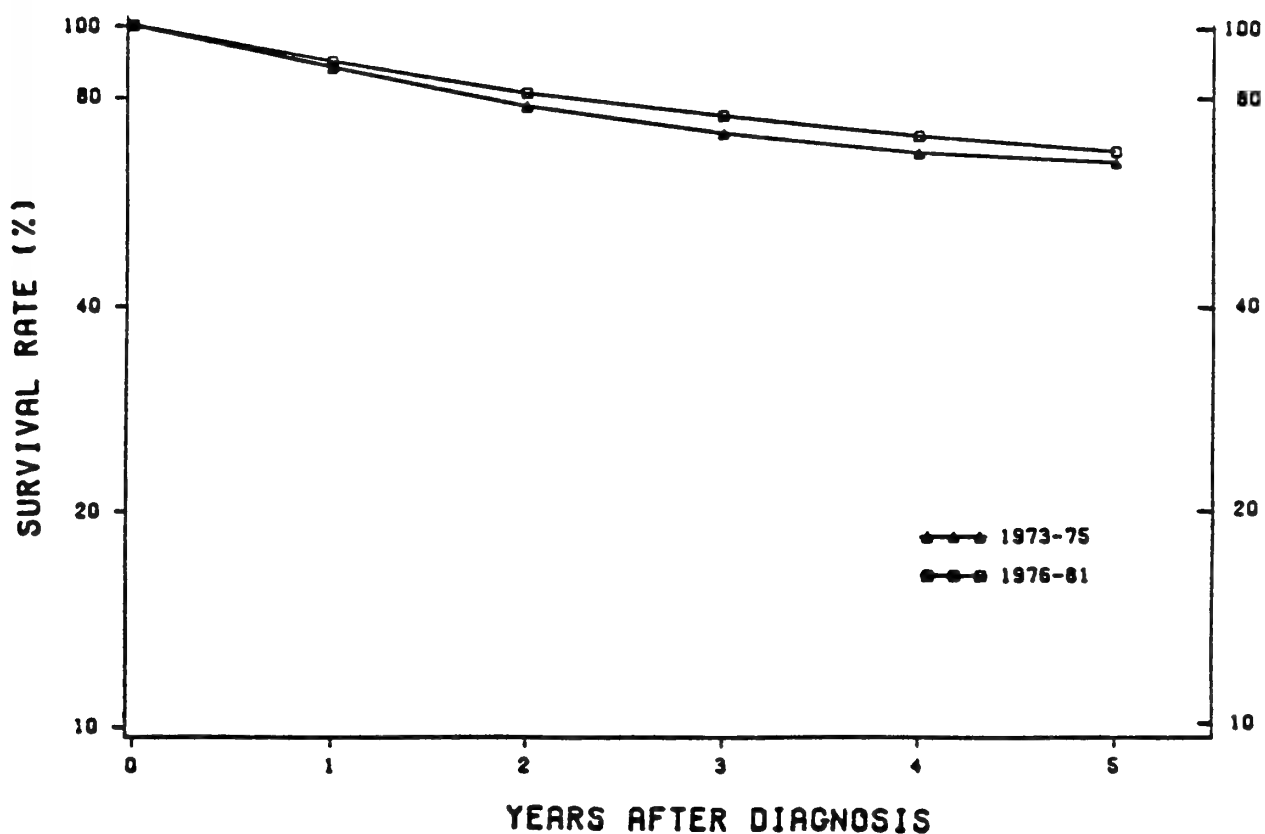


Figure V-19

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Lung and Bronchus  
Black Male**

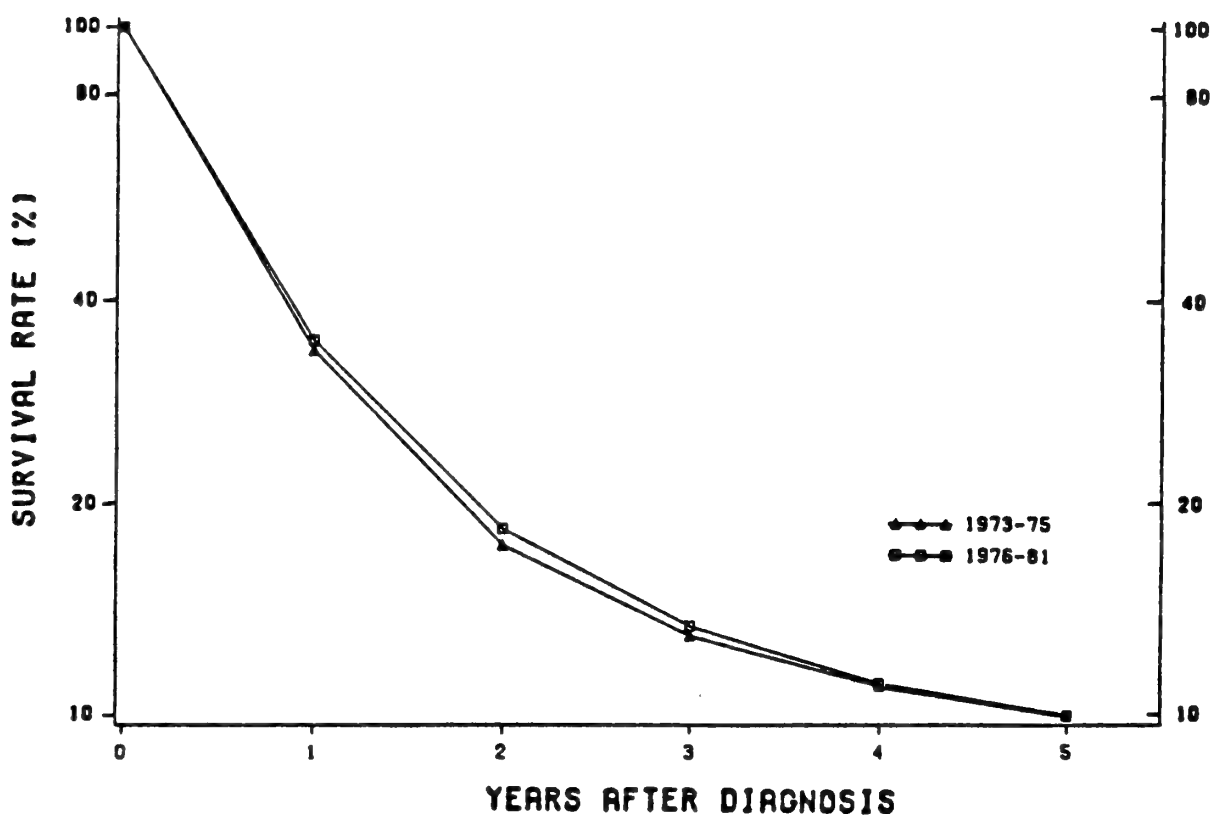




Figure V-20

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Lung and Bronchus  
White Male**

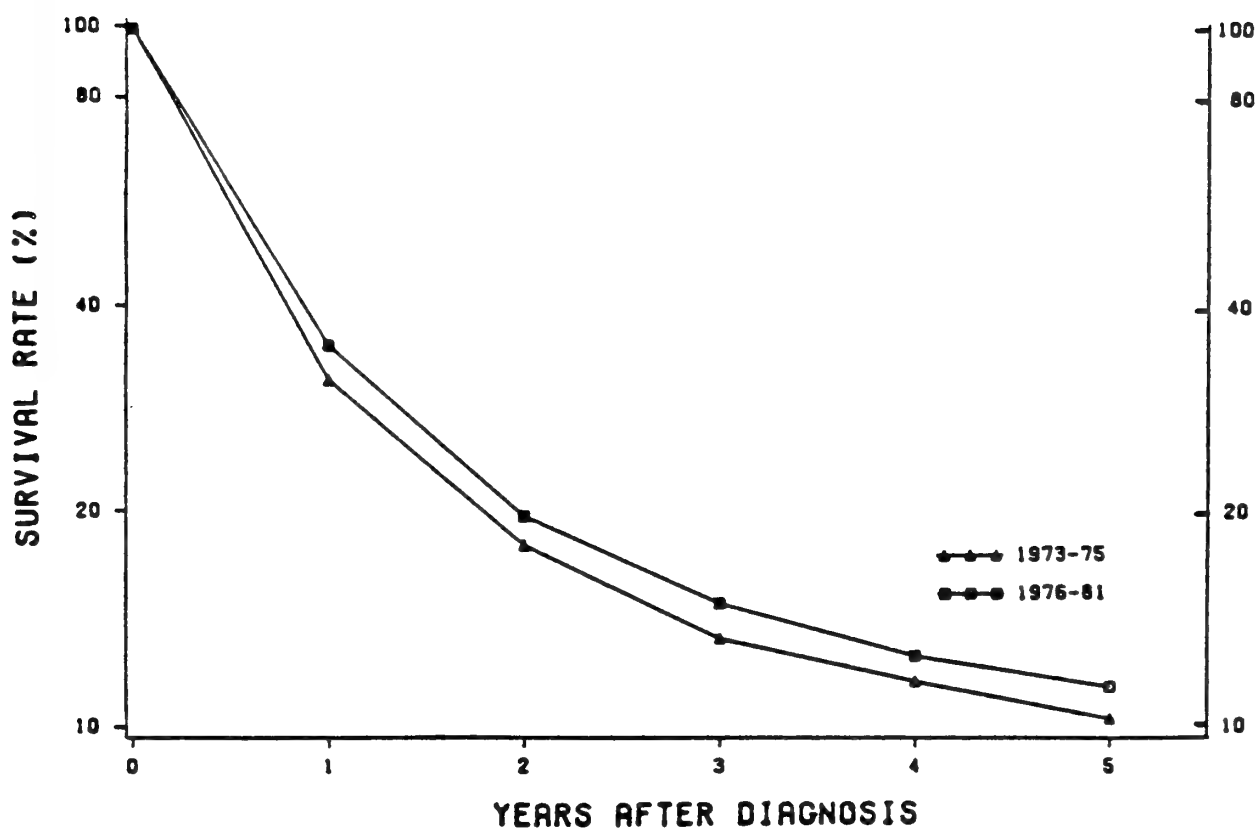


Figure V-21

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Lung and Bronchus  
Black Female**

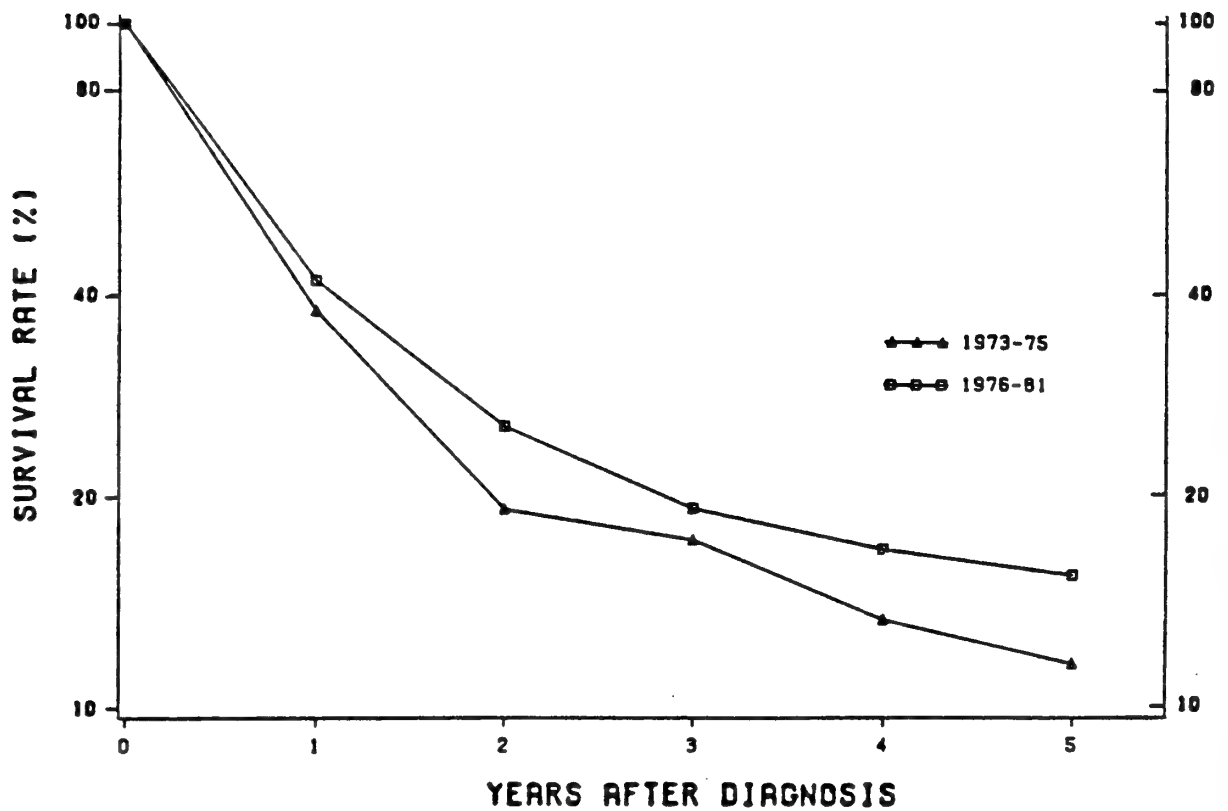


Figure V-22

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Lung and Bronchus  
White Female**

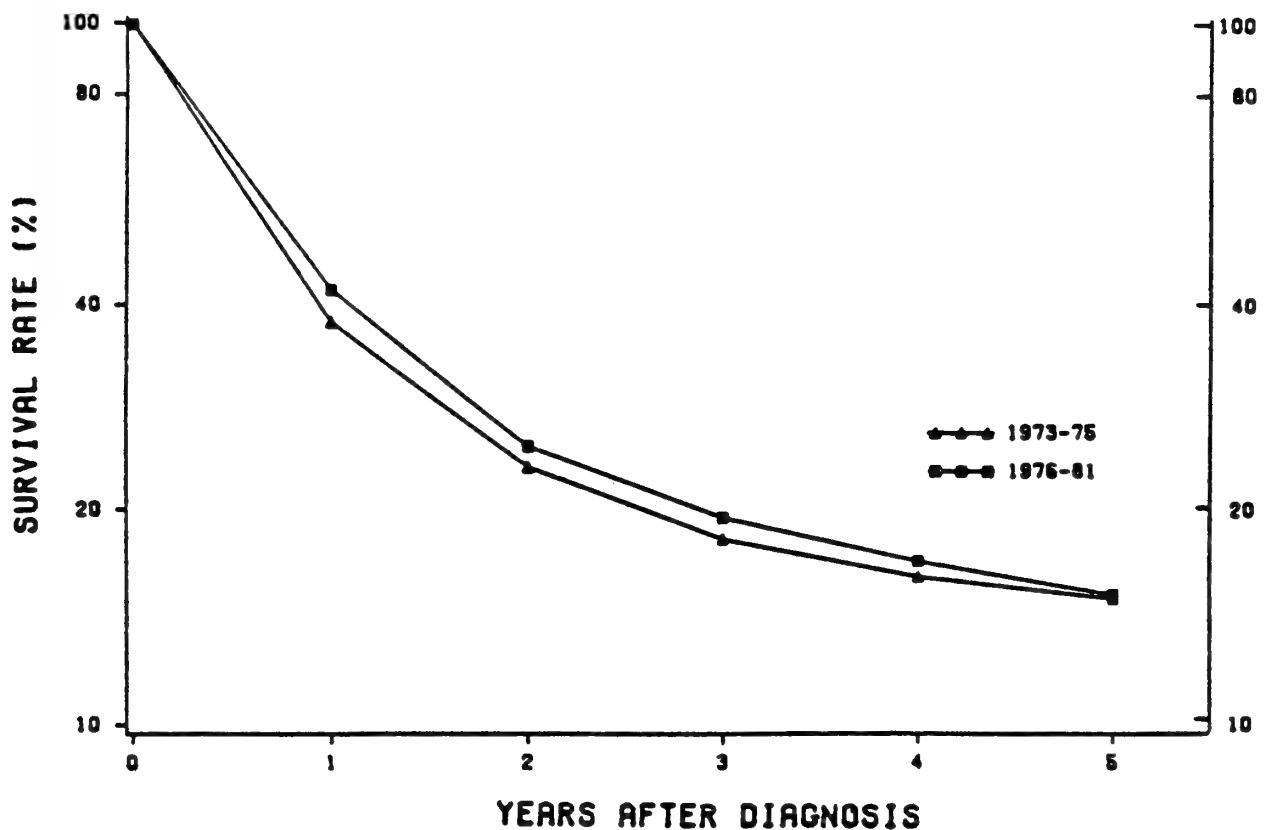


Figure V-23

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Multiple Myeloma  
Black**

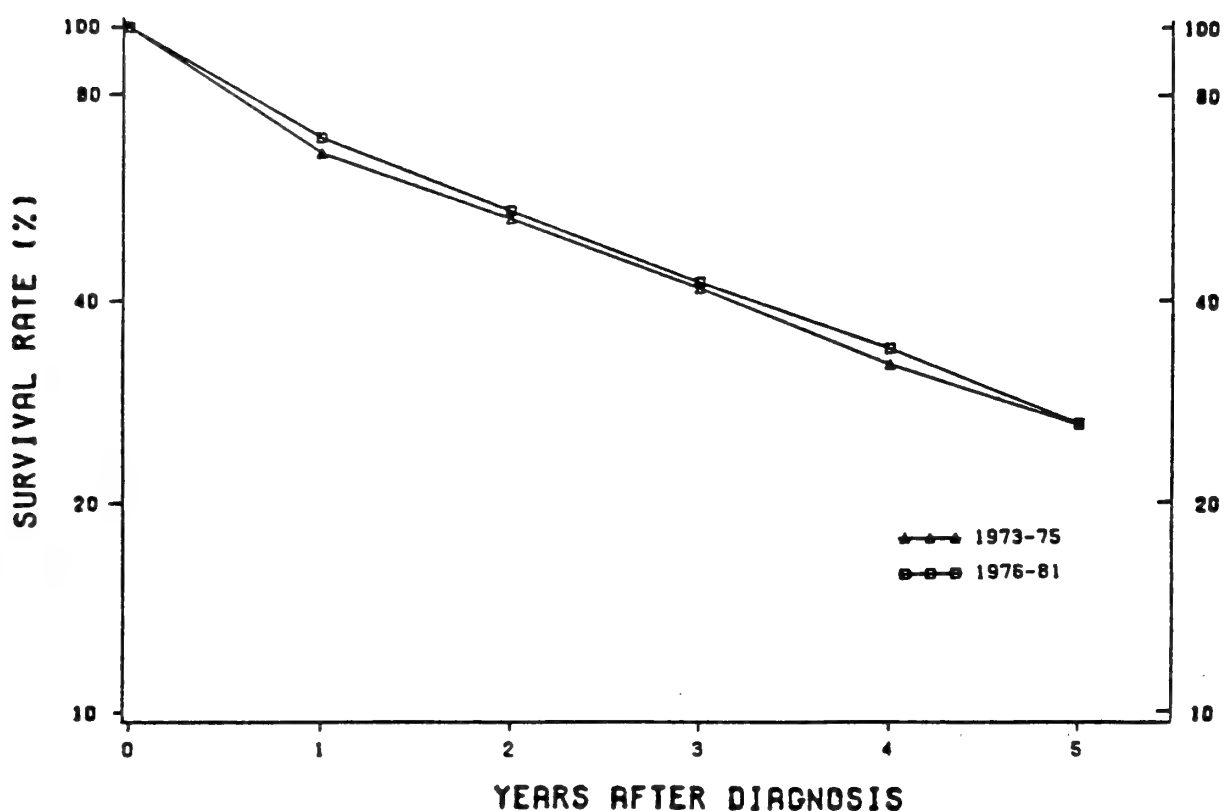


Figure V-24

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Multiple Myeloma  
White**

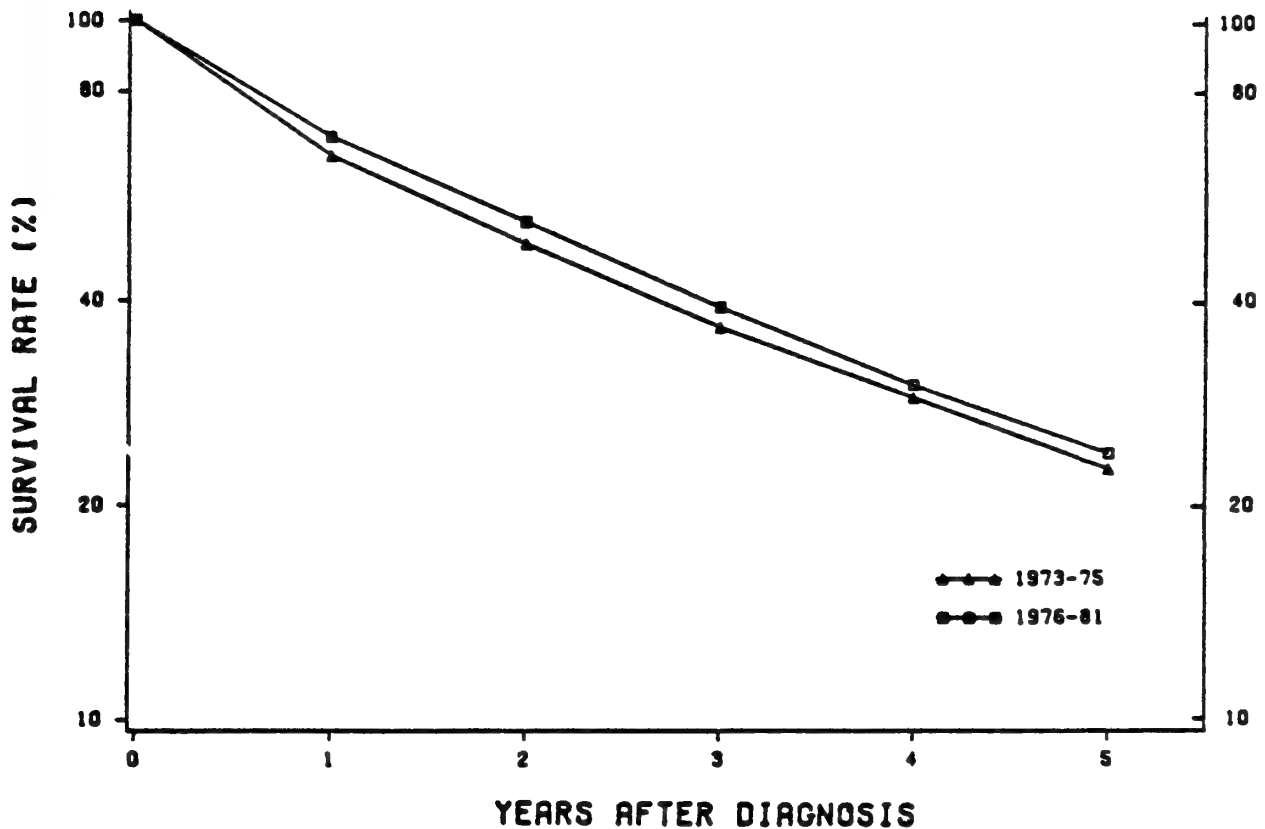


Figure V-25

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Ovary  
Black**

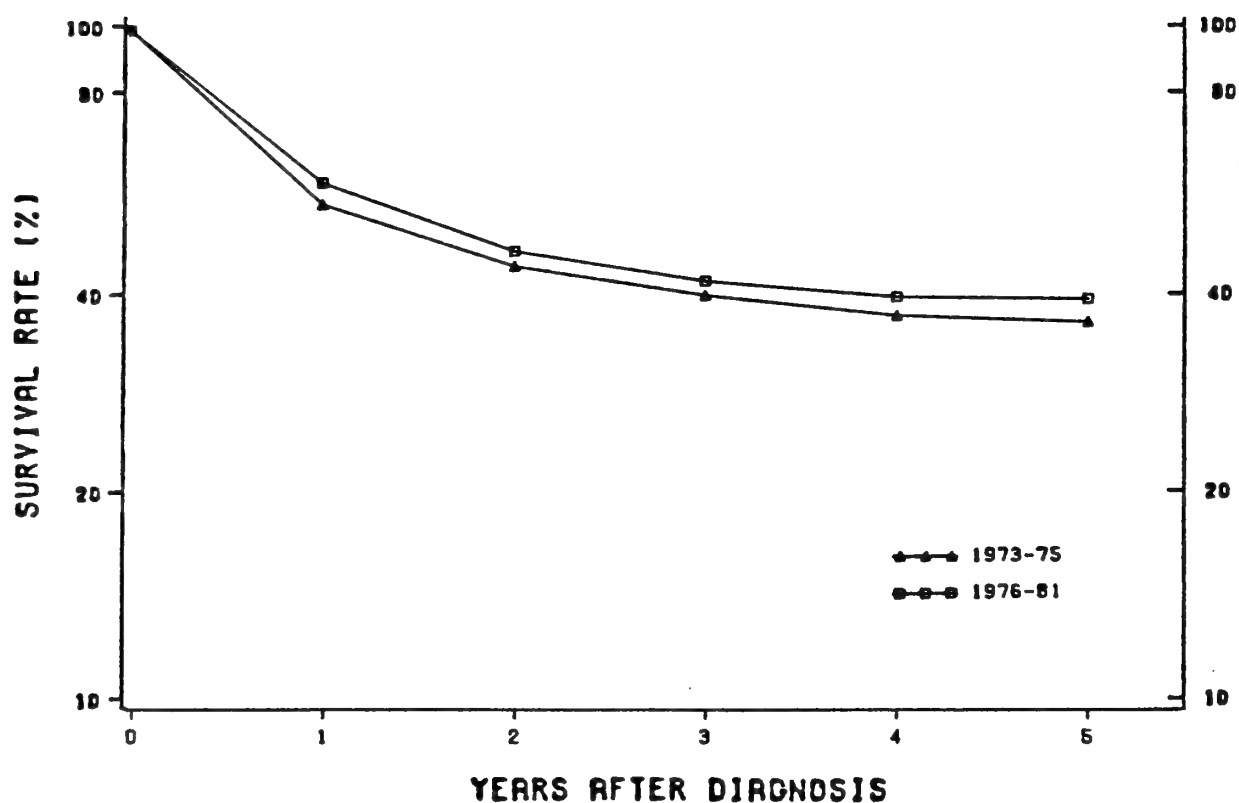


Figure V-26

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Ovary  
White**

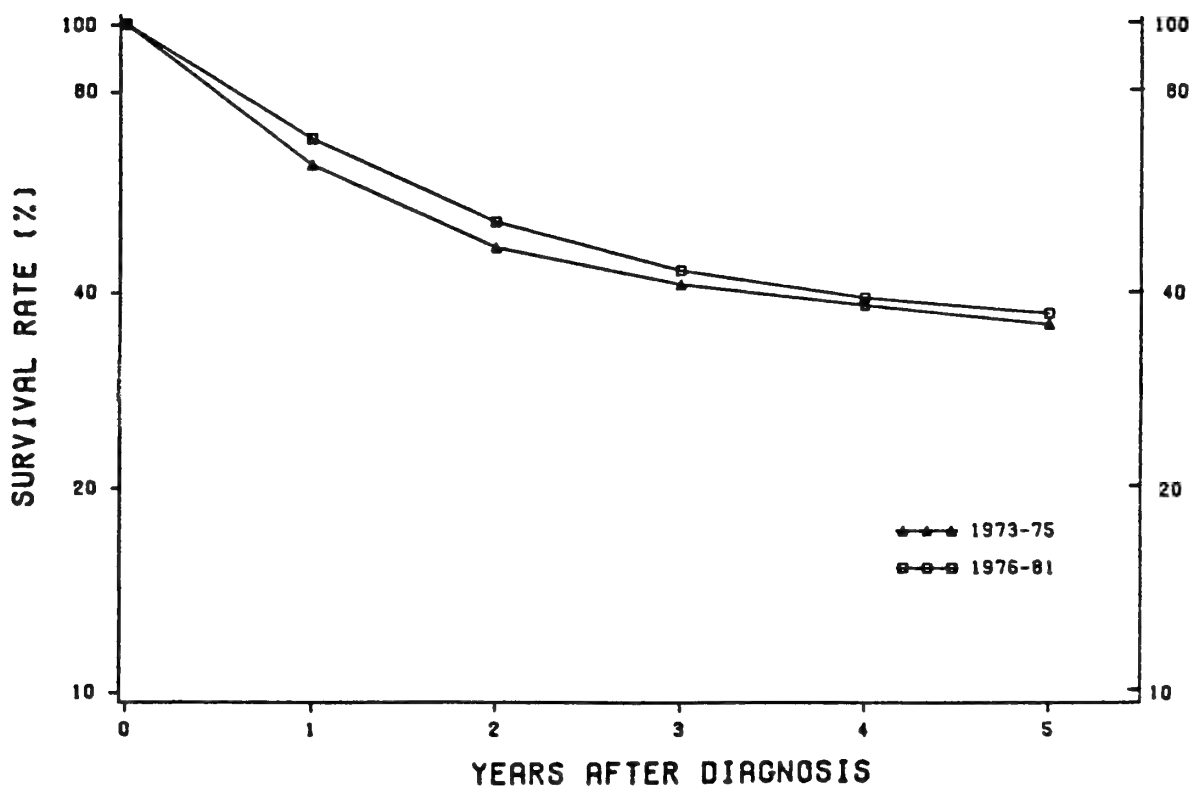


Figure V-27

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Pancreas  
Black**

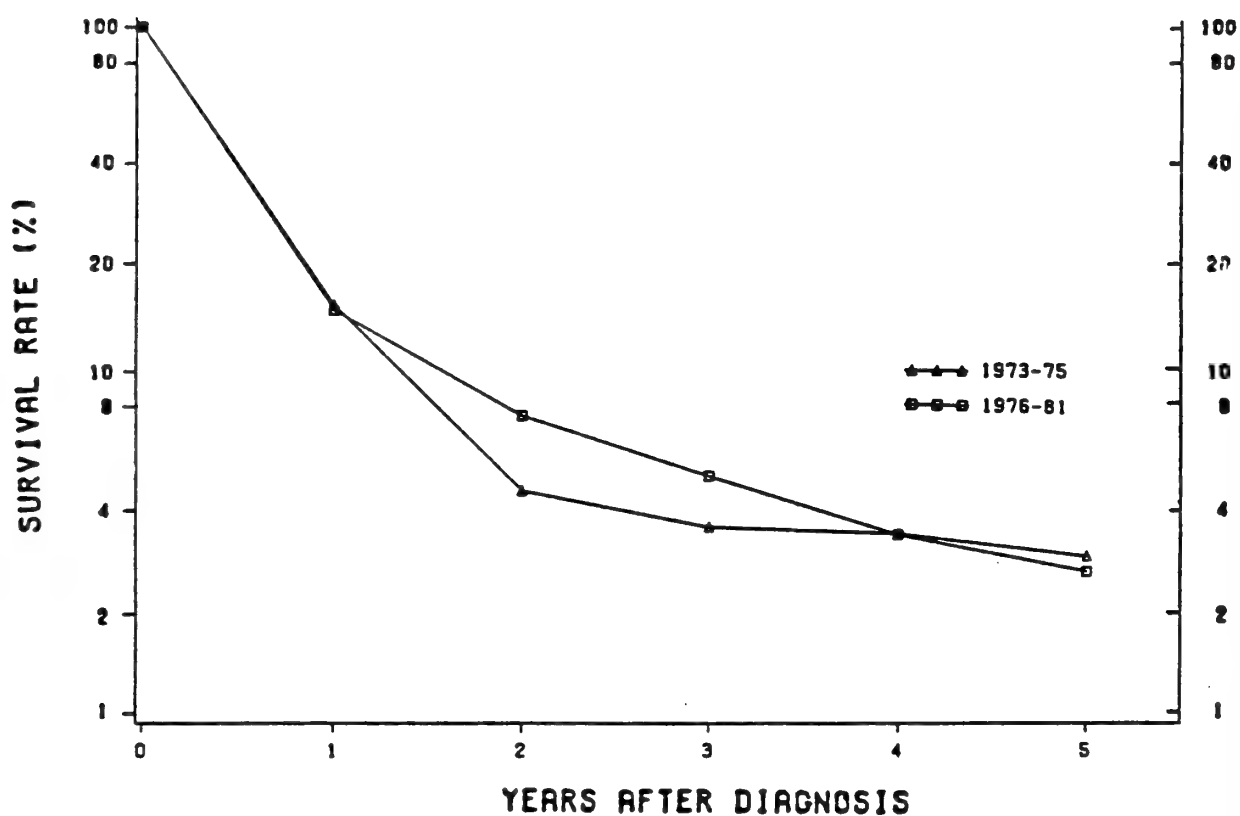




Figure V-28

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Pancreas  
White**

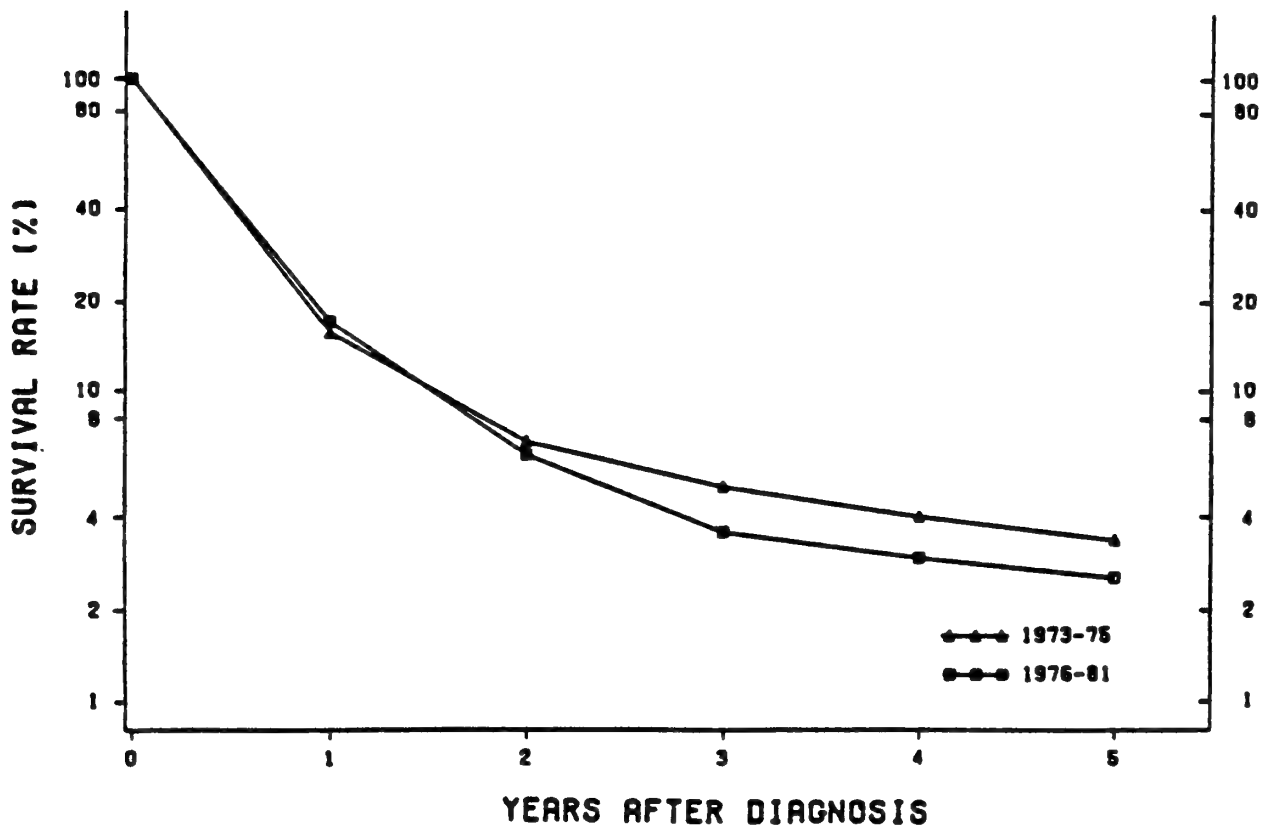


Figure V-29

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Prostate  
Black**

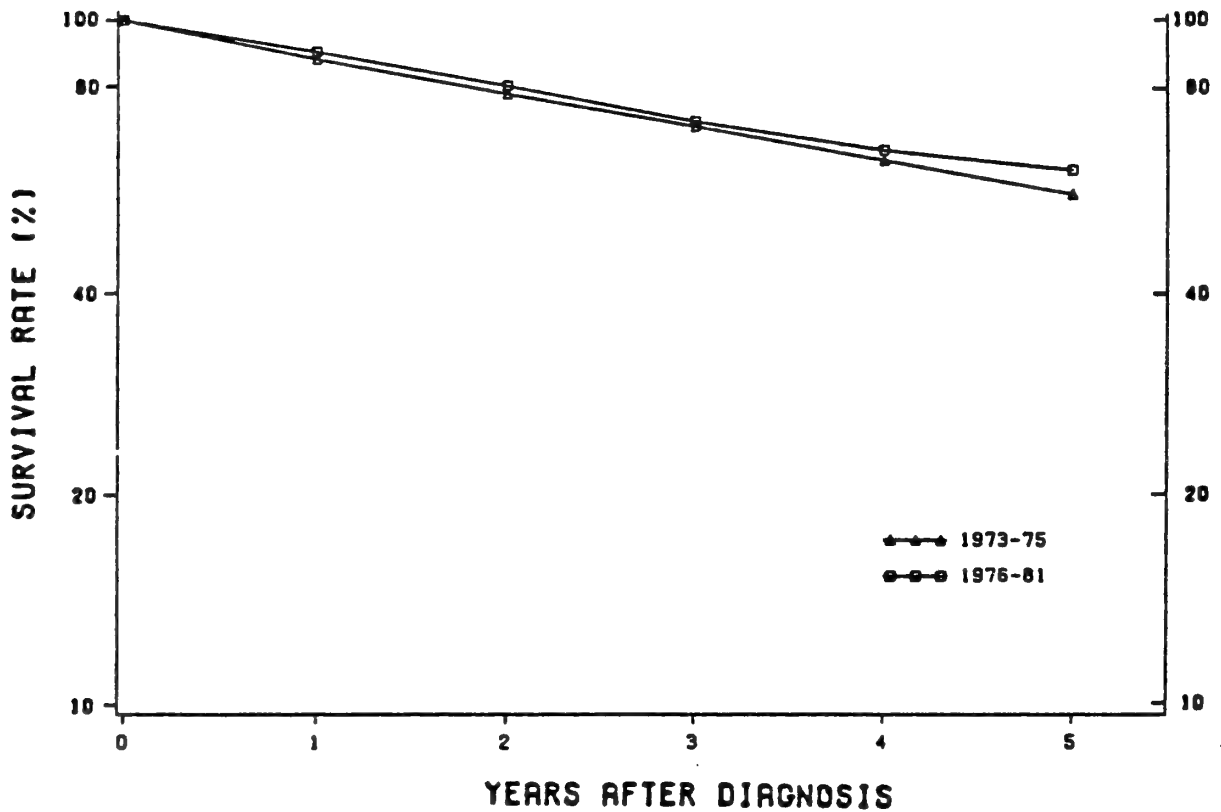


Figure V-30

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Prostate  
White**

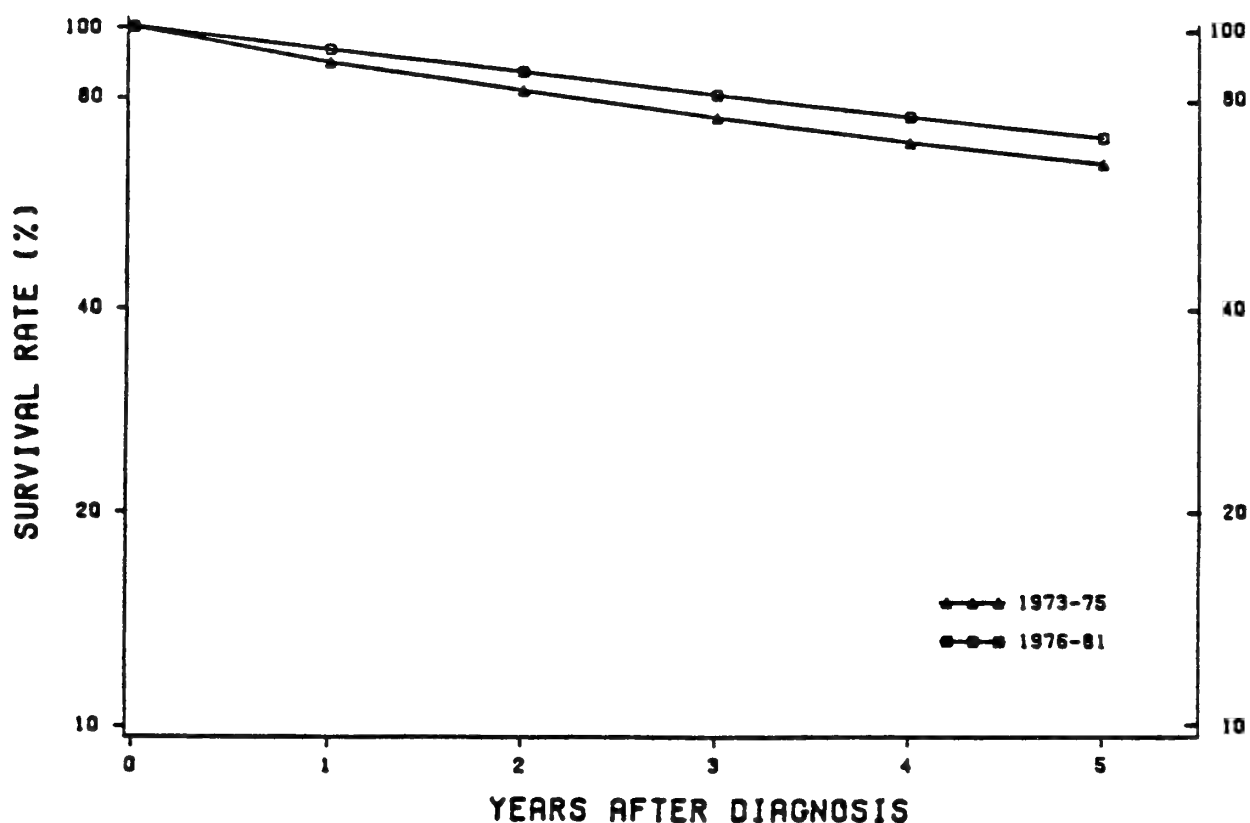


Figure V-31

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Rectum  
Black**

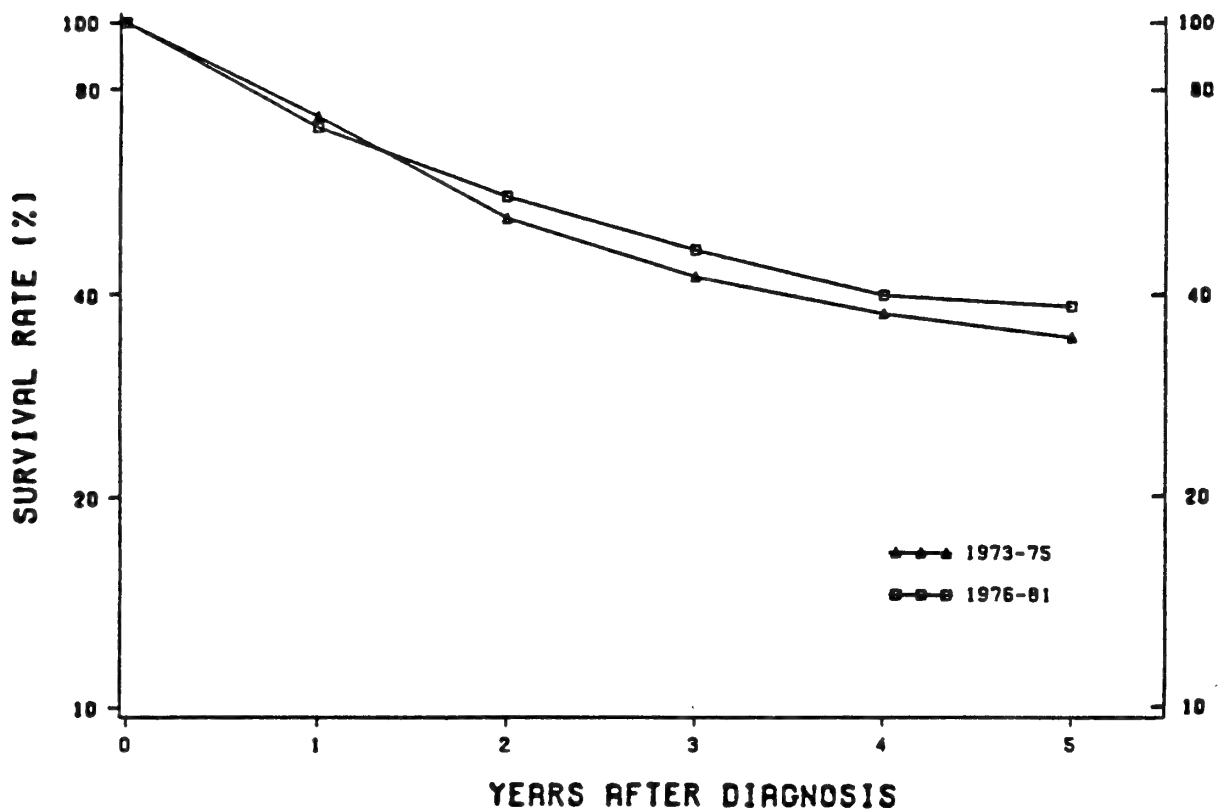


Figure V-32

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Rectum  
White**

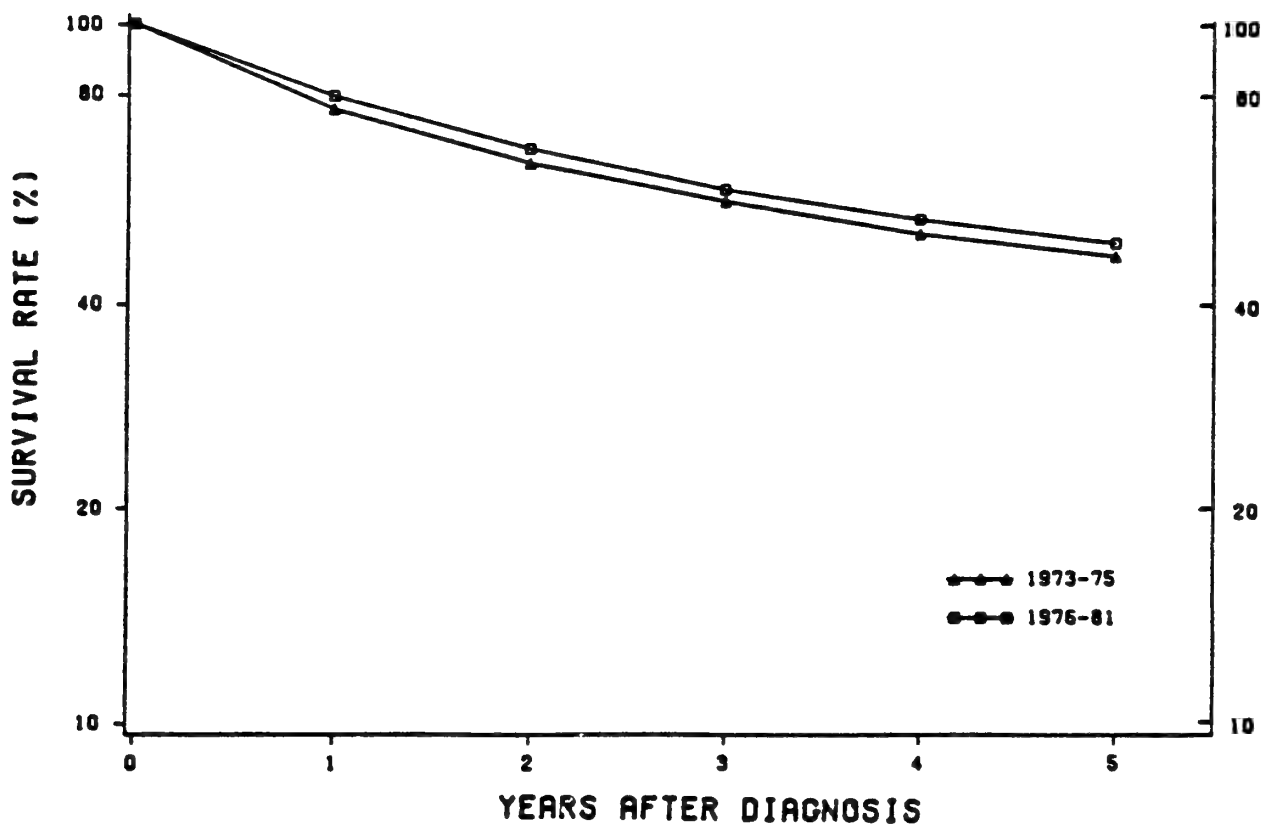


Figure V-33

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Stomach  
Black**

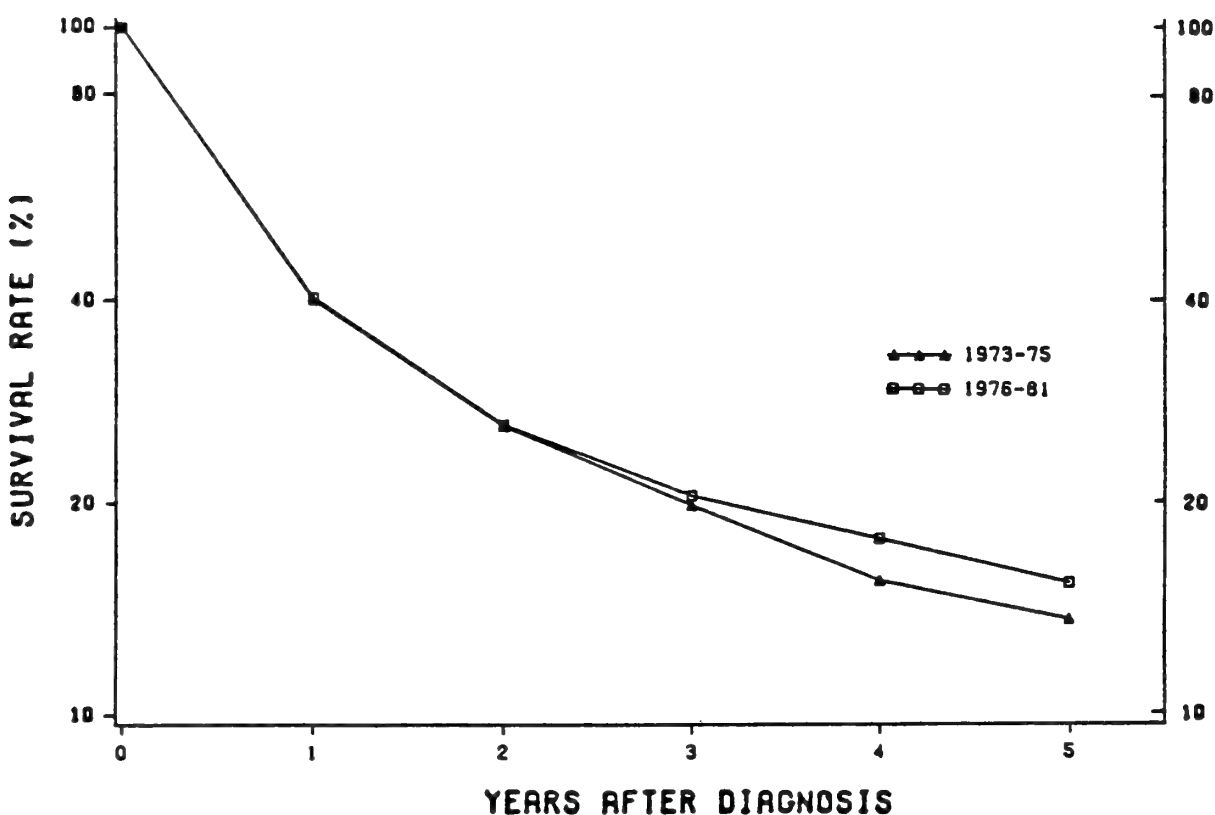
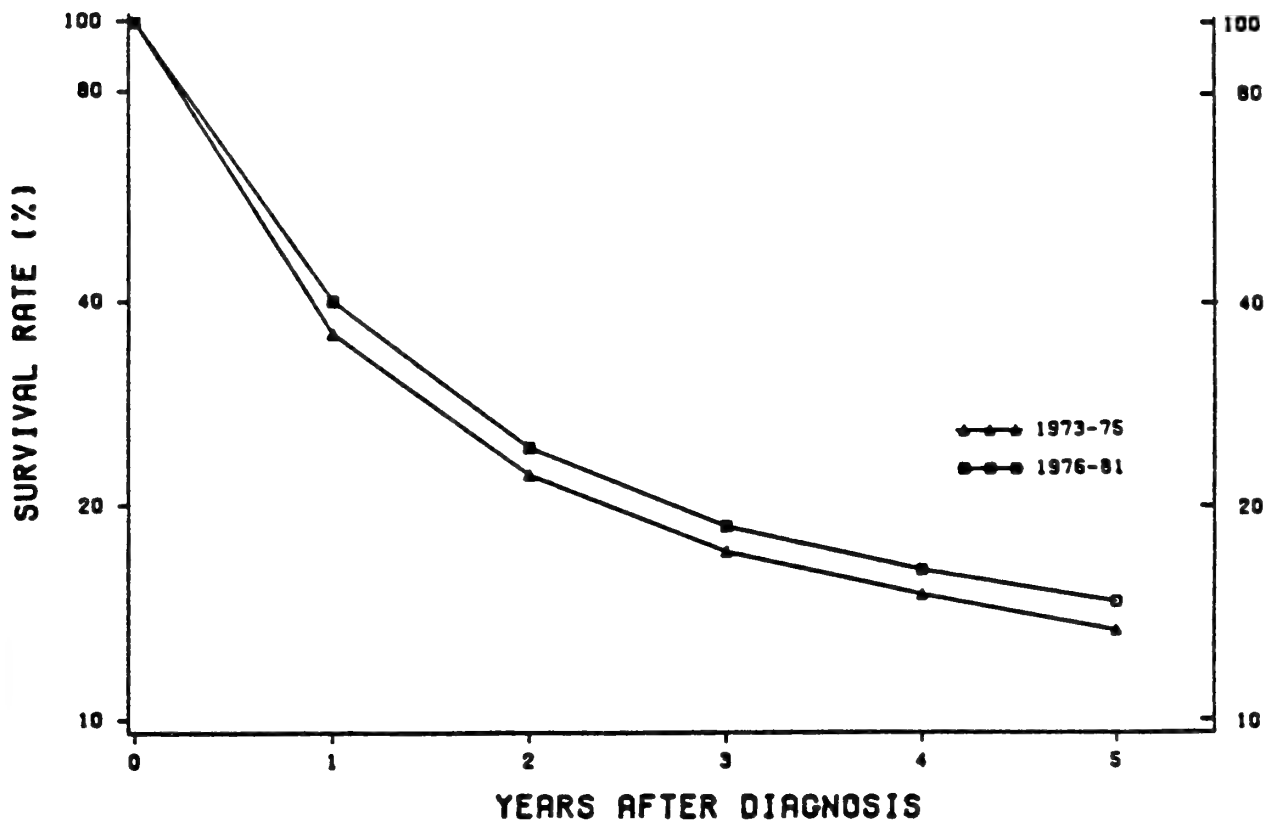


Figure V-34

**Relative Survival Rates by Successive Number of Years  
After Diagnosis and Year of Diagnosis,  
SEER Program: 1973-81  
(percent)**

**Stomach  
White**

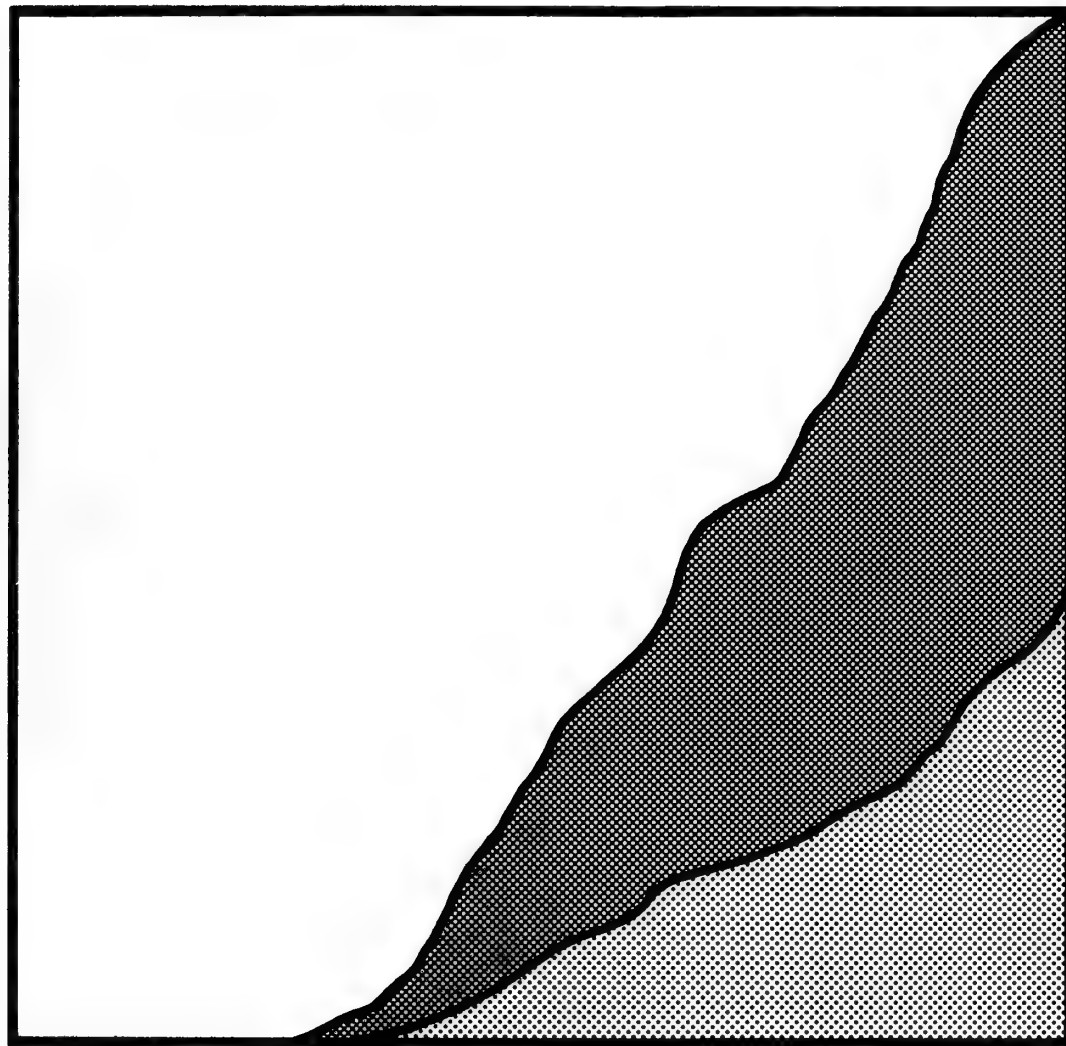


NOTE: WHITE MALES & FEMALES





**Section VI.**  
**Five-Year Relative Survival**  
**By Stage Of Cancer**  
**At Diagnosis For**  
**Blacks And Whites**





# TABLE OF CONTENTS

## SECTION VI. FIVE-YEAR RELATIVE SURVIVAL BY STAGE OF CANCER AT DIAGNOSIS FOR BLACKS AND WHITES

	Page
<b>Discussion</b> .....	193
 <i>Five-year Relative Survival Rates by Cancer Stage at Diagnosis: 1977-81</i>	
Figure VI-1. Bladder .....	195
Figure VI-2. Breast, Female .....	196
Figure VI-3. Cervix Uteri .....	197
Figure VI-4. Colon .....	198
Figure VI-5. Colon and Rectum .....	199
Figure VI-6. Corpus Uteri .....	200
Figure VI-7. Esophagus (white only) .....	201
Figure VI-8. Lung .....	202
Figure VI-9. Melanoma (white only) .....	203
Figure VI-10. Ovary .....	204
Figure VI-11. Prostate .....	205
Figure VI-12. Rectum .....	206
Figure VI-13. Stomach .....	207



## **Section VI. Five-Year Relative Survival by Stage of Cancer at Diagnosis for Blacks and Whites**

### **Discussion**

The detailed classification of patients by stage of disease at diagnosis has been available in a consistent, comparable manner through SEER only since 1977. The classification of stage or extent of disease at diagnosis used in SEER is compatible with that developed by the American Joint Committee on Cancer. Generally, the more advanced or higher stages of disease have poorer survival than the less advanced or lower stages. Since earlier stages of disease data (before 1977) are not comparable, it is not possible to assess changes in stage distributions over time. Thus, the data presented in this section are derived entirely from SEER.

The data presented here compare five-year relative survival rates between white and black patients within stage of disease categories for each primary site. For many sites the number of black patients are too small in specific stage categories to draw meaningful conclusions. For several sites, however, even though the survival rates for white patients are significantly higher than those for black patients for all stages combined, survival differences tend to disappear within individual stage categories. This is because cancer is generally detected at more favorable stages of disease among white patients.

The figures in this section are a set of bar graphs which compare black and white five-year relative survival rates for various stages of disease for primary cancer sites. Survival data by stage of disease for cancers of the esophagus and melanoma were available for whites only. Due to data collection procedures, information about female breast cancer has been available since 1975 and is presented in Figure VI-2.

### **Highlights**

- The difference in survival for breast cancers between white and black patients was large and statistically significant (75 percent vs. 63 percent), but this was accounted for primarily by those who presented for diagnosis with lymph node involvement or direct extension of the tumor to adjacent tissue (Stage III.B).
- For cancer of the corpus uteri, the site with the greatest difference in survival between black and white patients, there was a large, statistically significant difference between blacks and whites even for Stage I disease (92 percent vs. 75 percent respectively). The numbers of black patients were too small to draw meaningful conclusions for the other stages.
- Black patients had a slightly higher survival rate for cancer of the ovary than did white patients. This was true not only for all stages combined but also for each stage of disease at diagnosis.



Figure VI-1

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Bladder

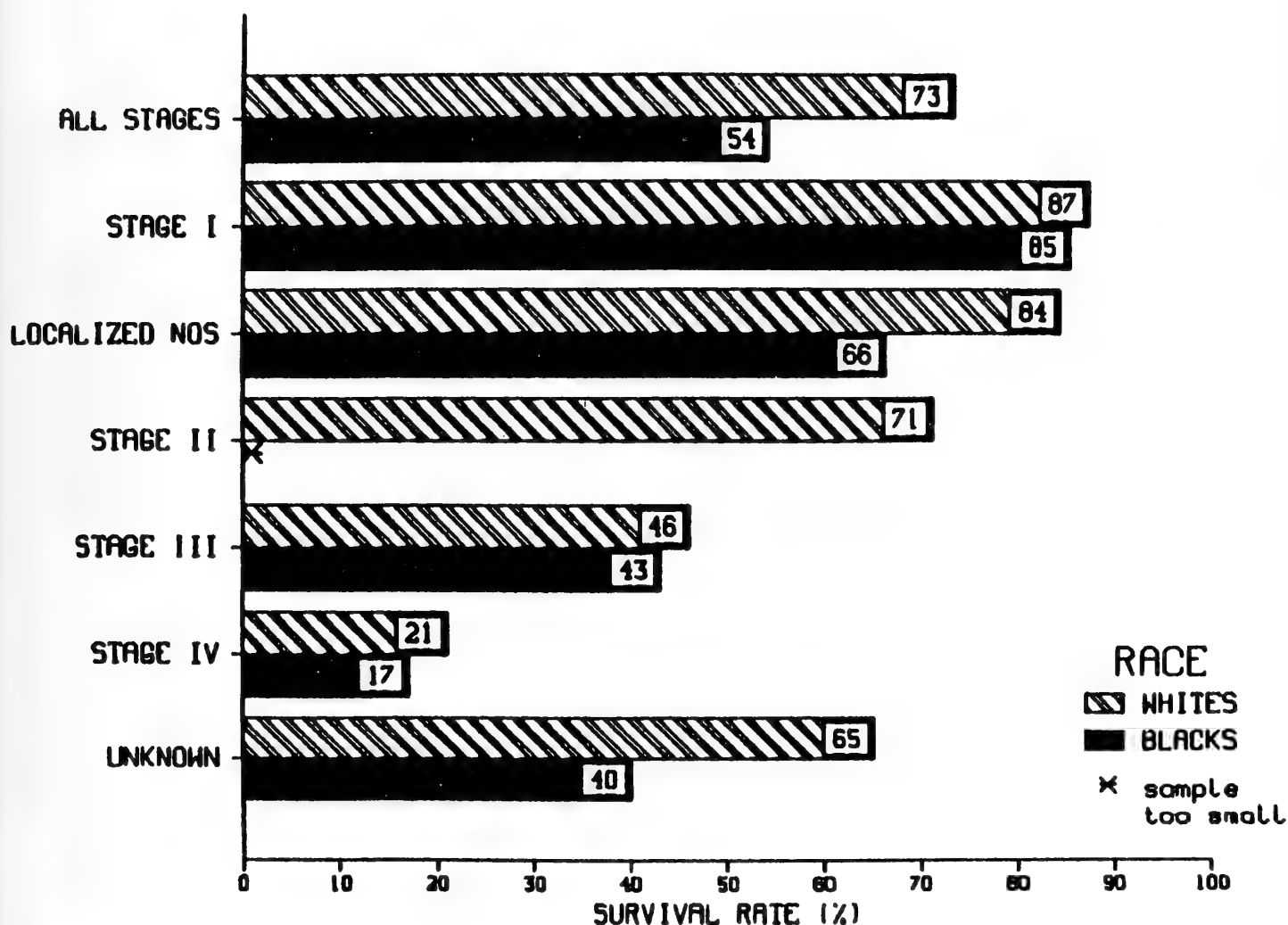


Figure VI-2

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1975-81 (percent)

## Breast, Female

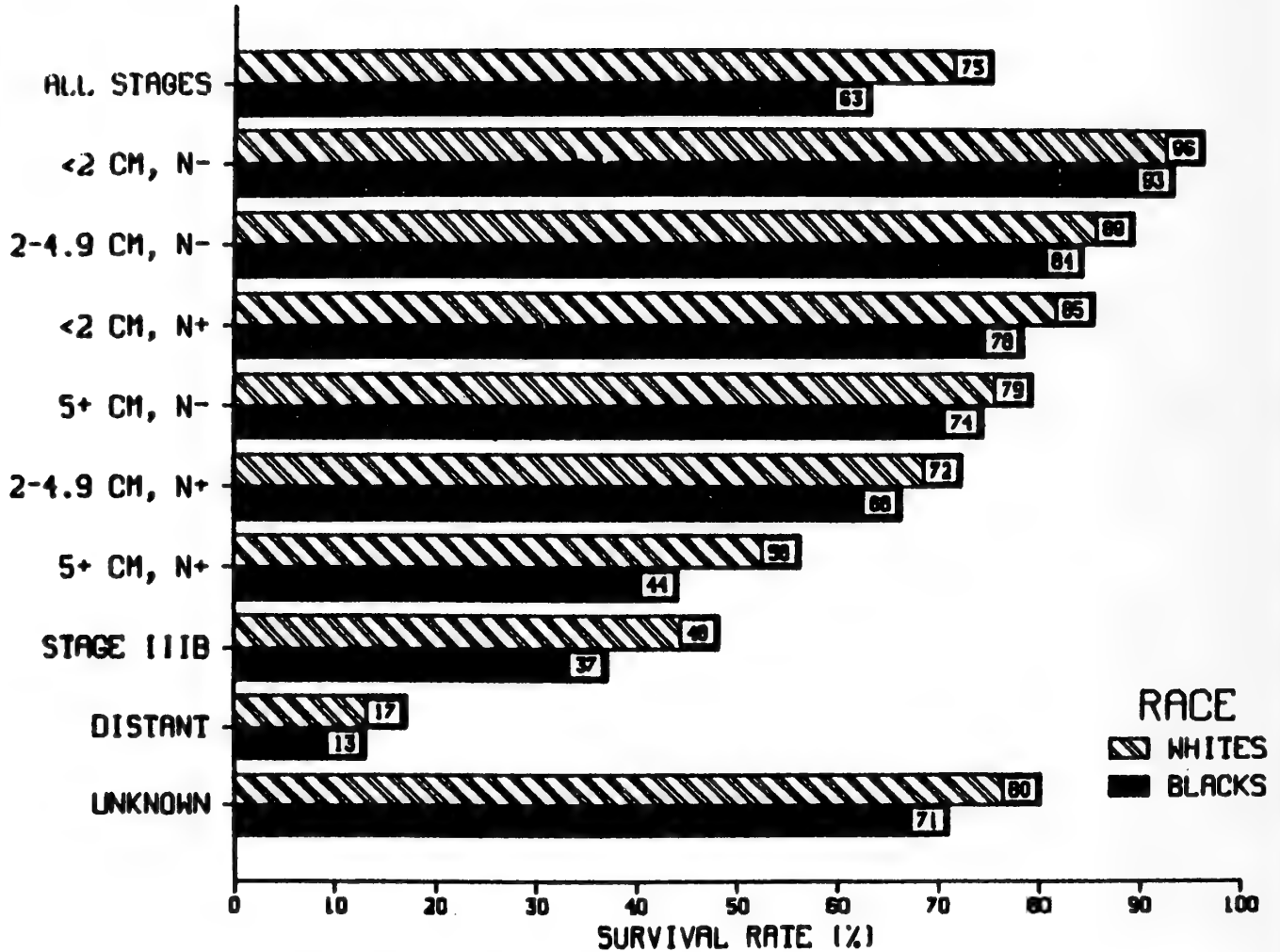




Figure VI-3

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Cervix Uteri

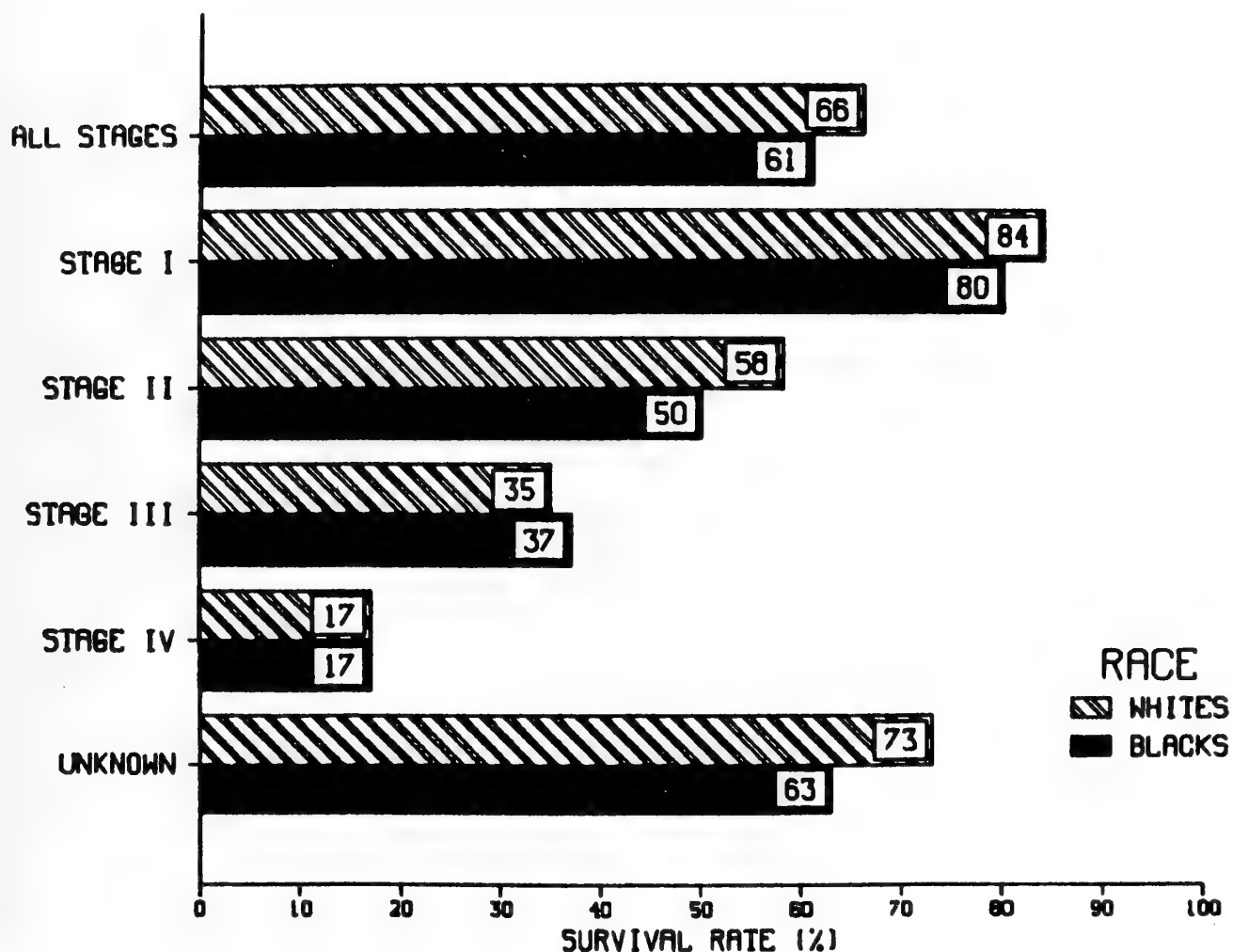


Figure VI-4

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Colon

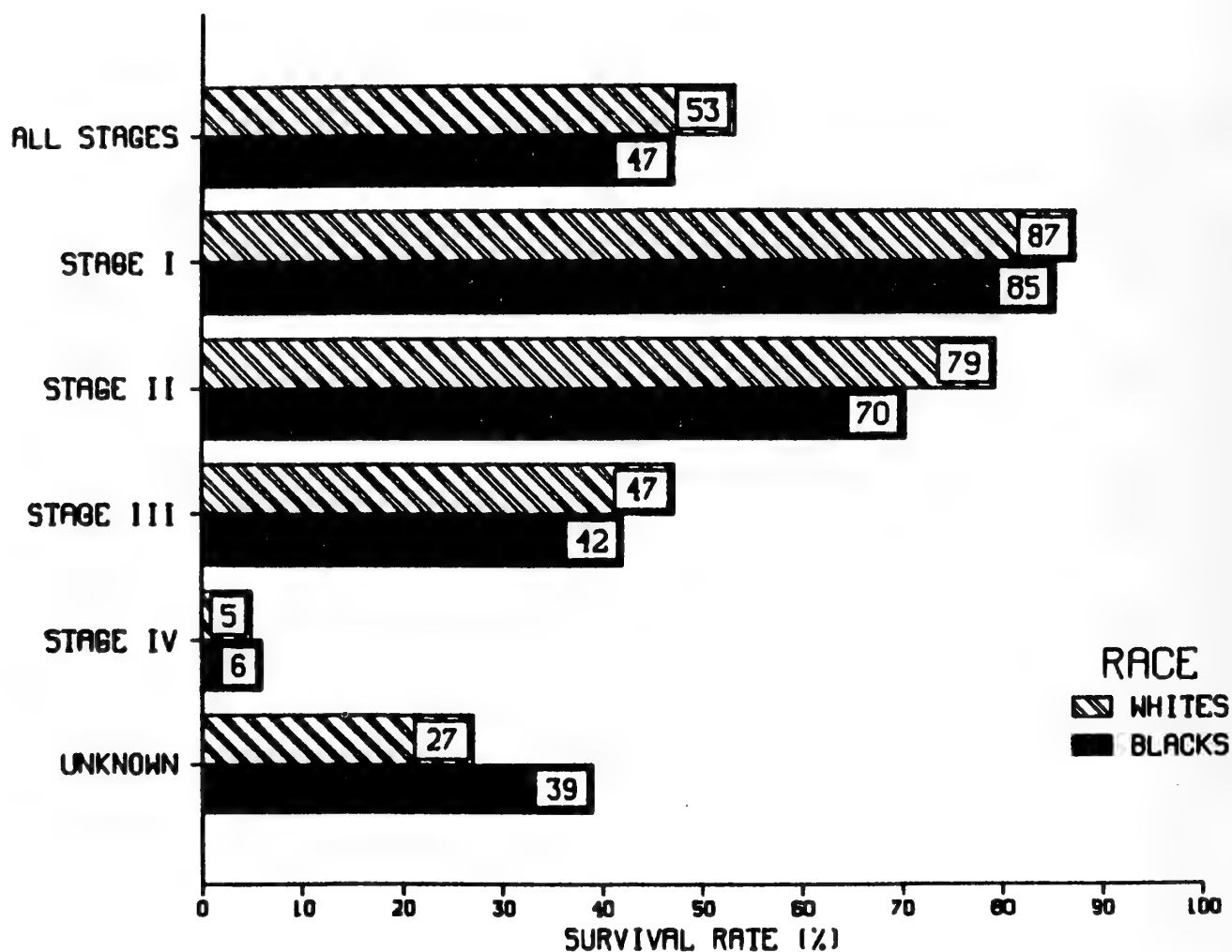


Figure VI-5

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Colon and Rectum

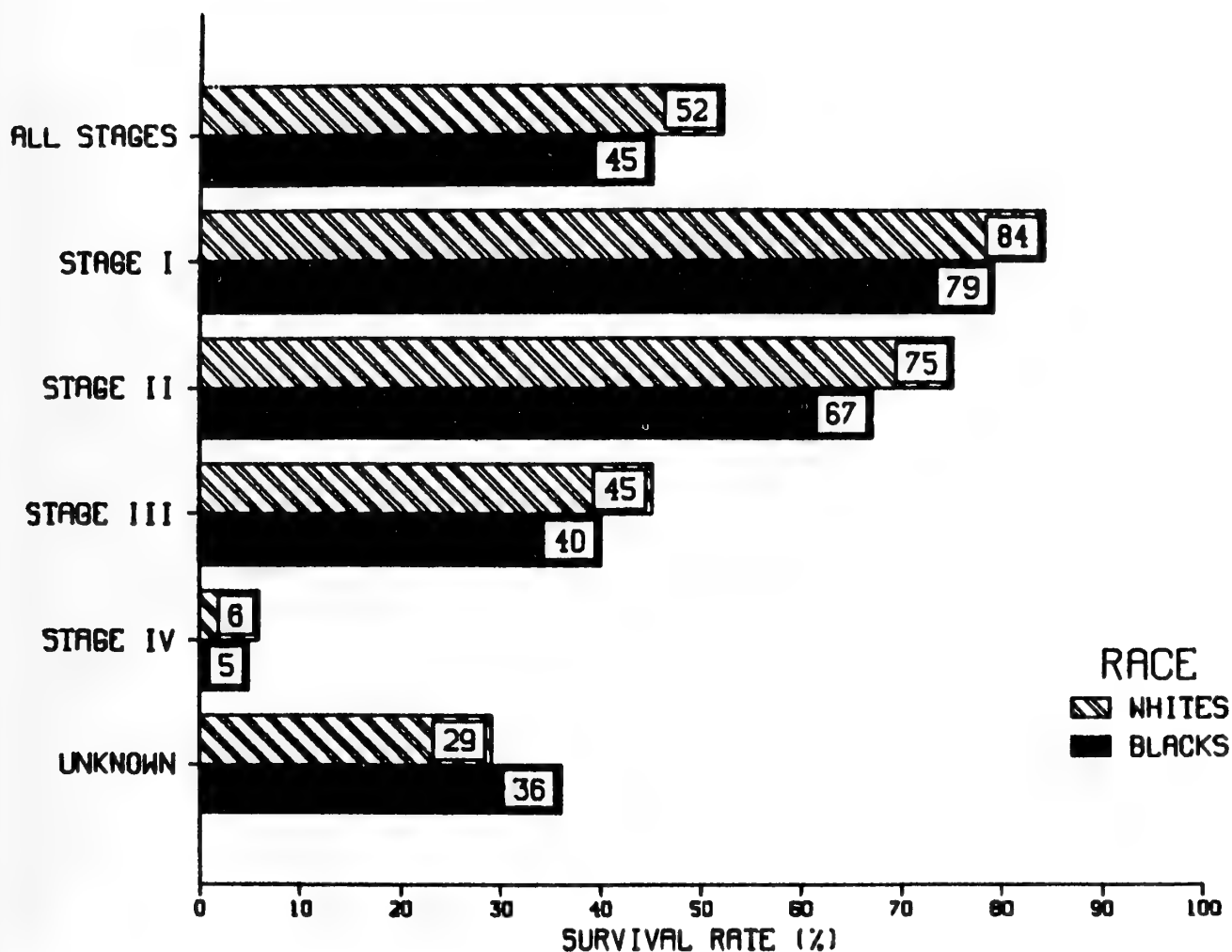


Figure VI-6

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Corpus Uteri

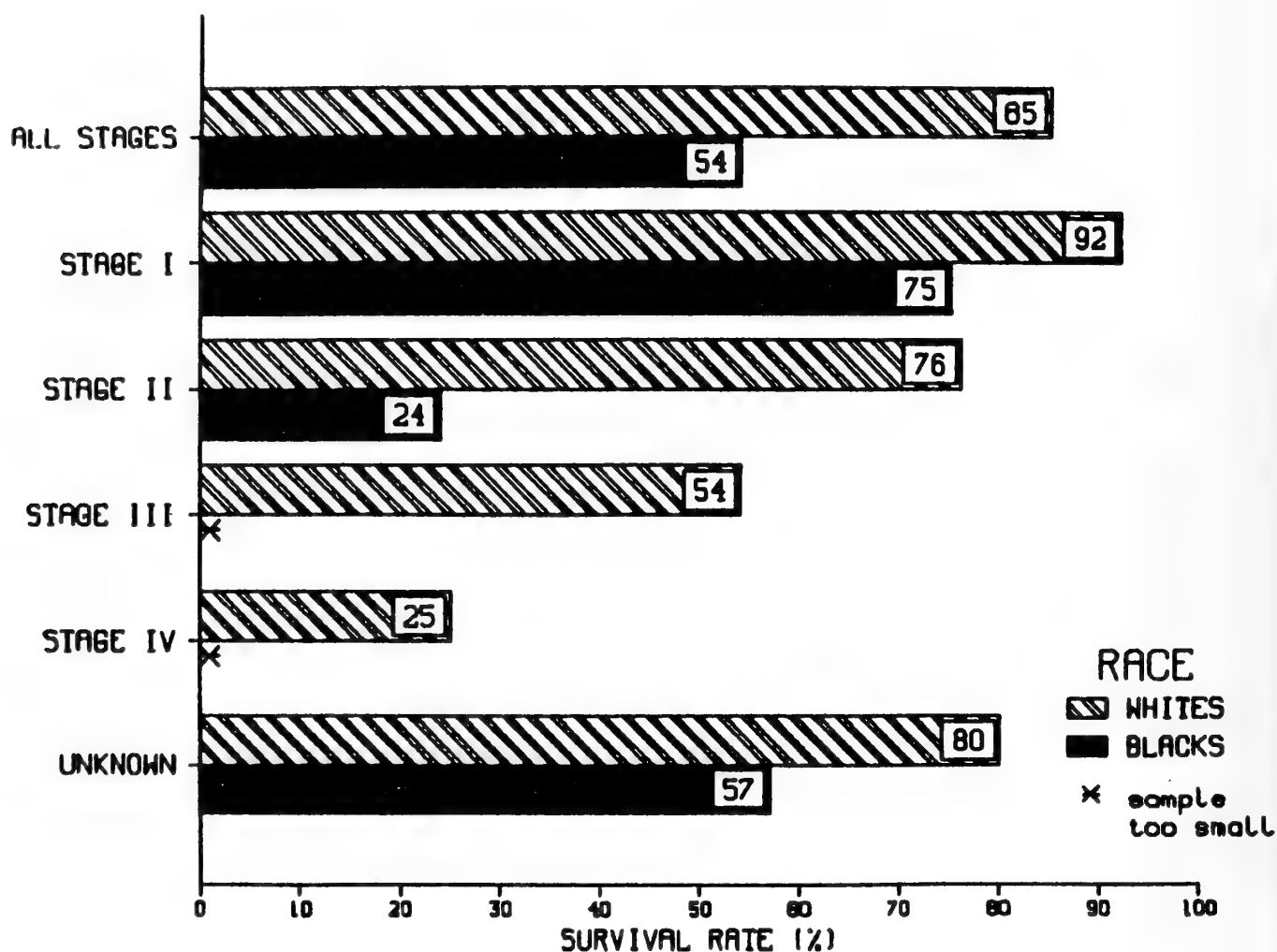


Figure VI-7

**Five-year Relative Survival Rates  
by Cancer Stage At Diagnosis: 1977-81  
(percent)**

**Esophagus  
(White only)**

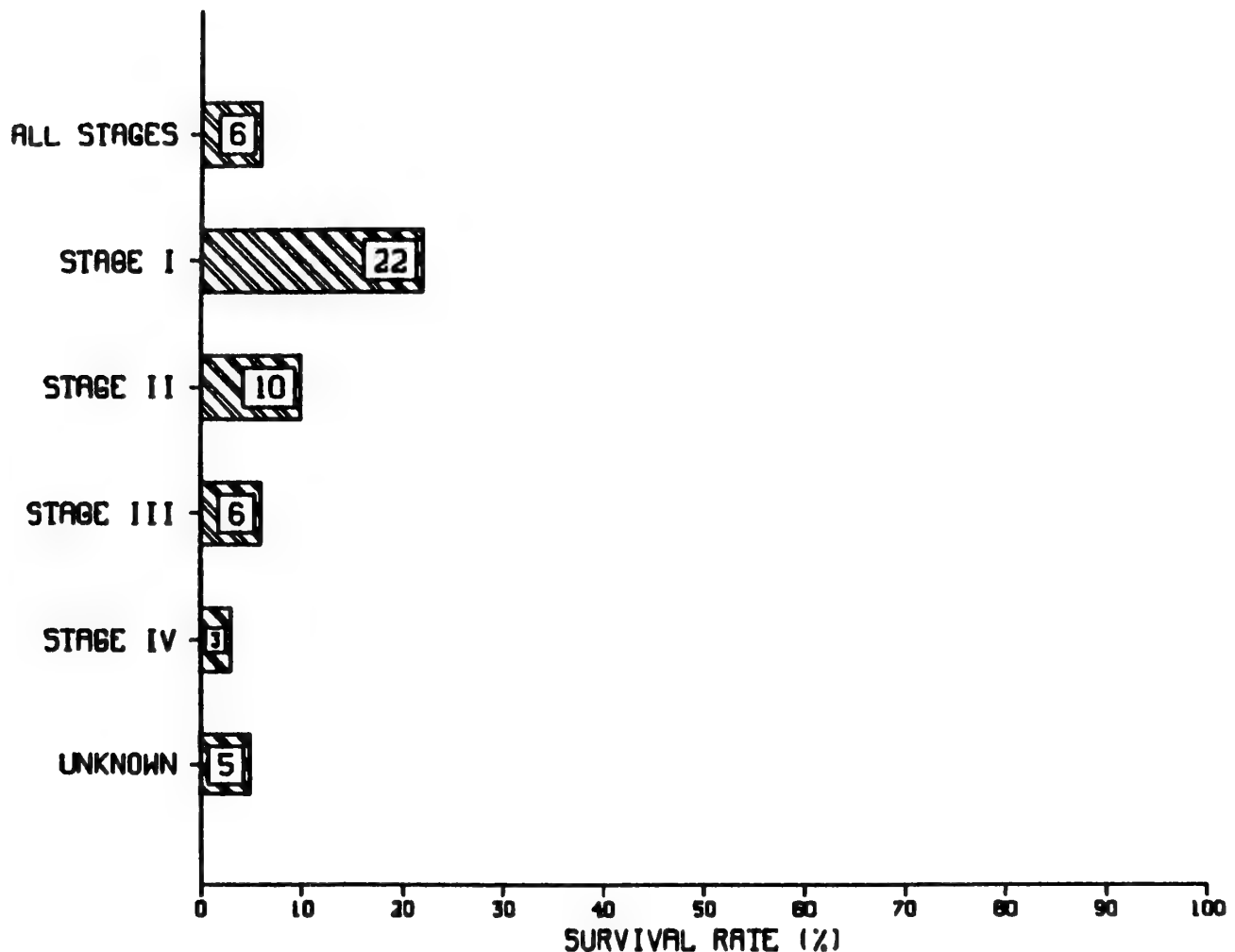


Figure VI-8

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Lung

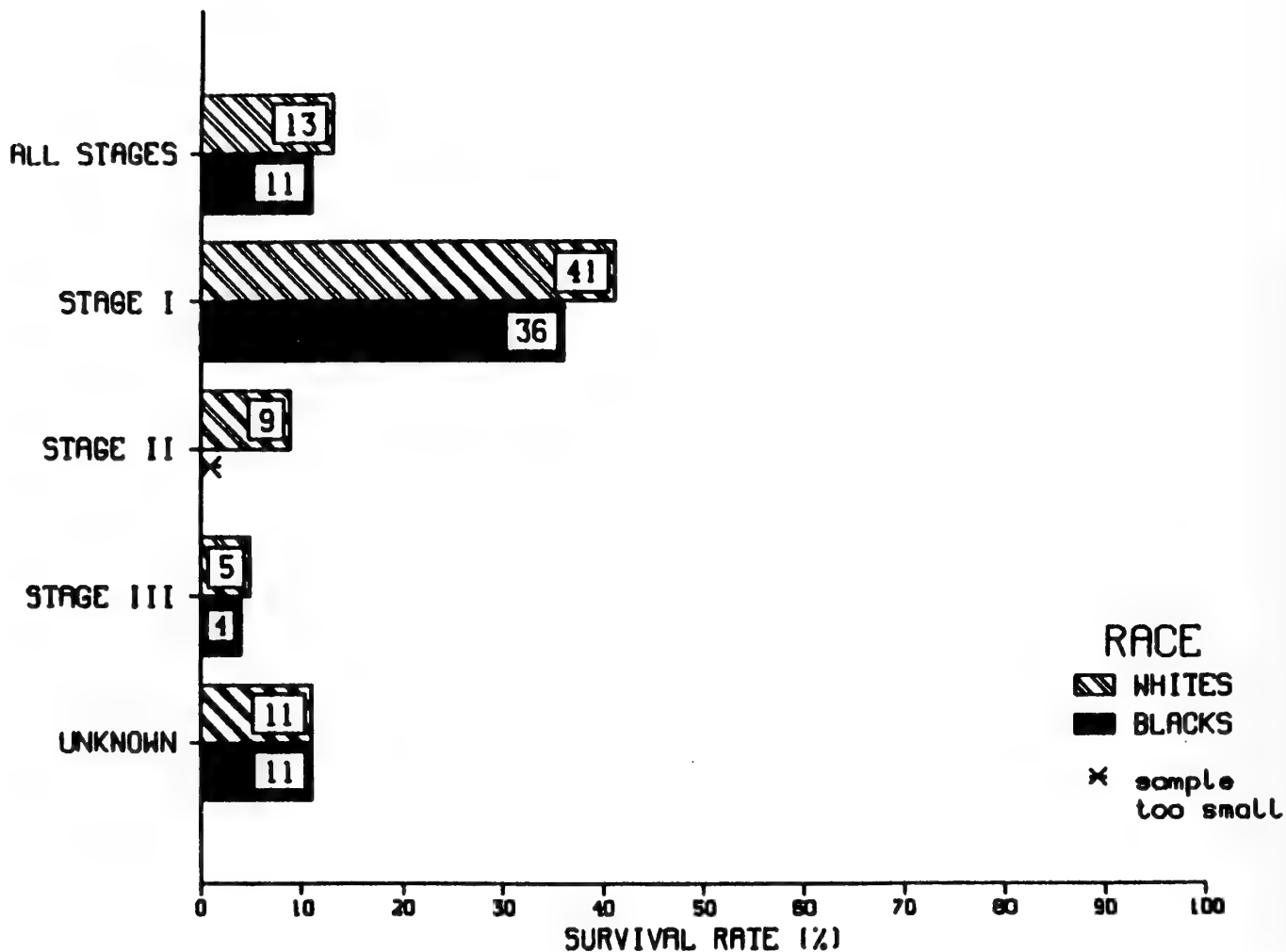


Figure VI-9

**Five-year Relative Survival Rates  
by Cancer Stage At Diagnosis: 1977-81  
(percent)**

**Melanoma  
(White only)**

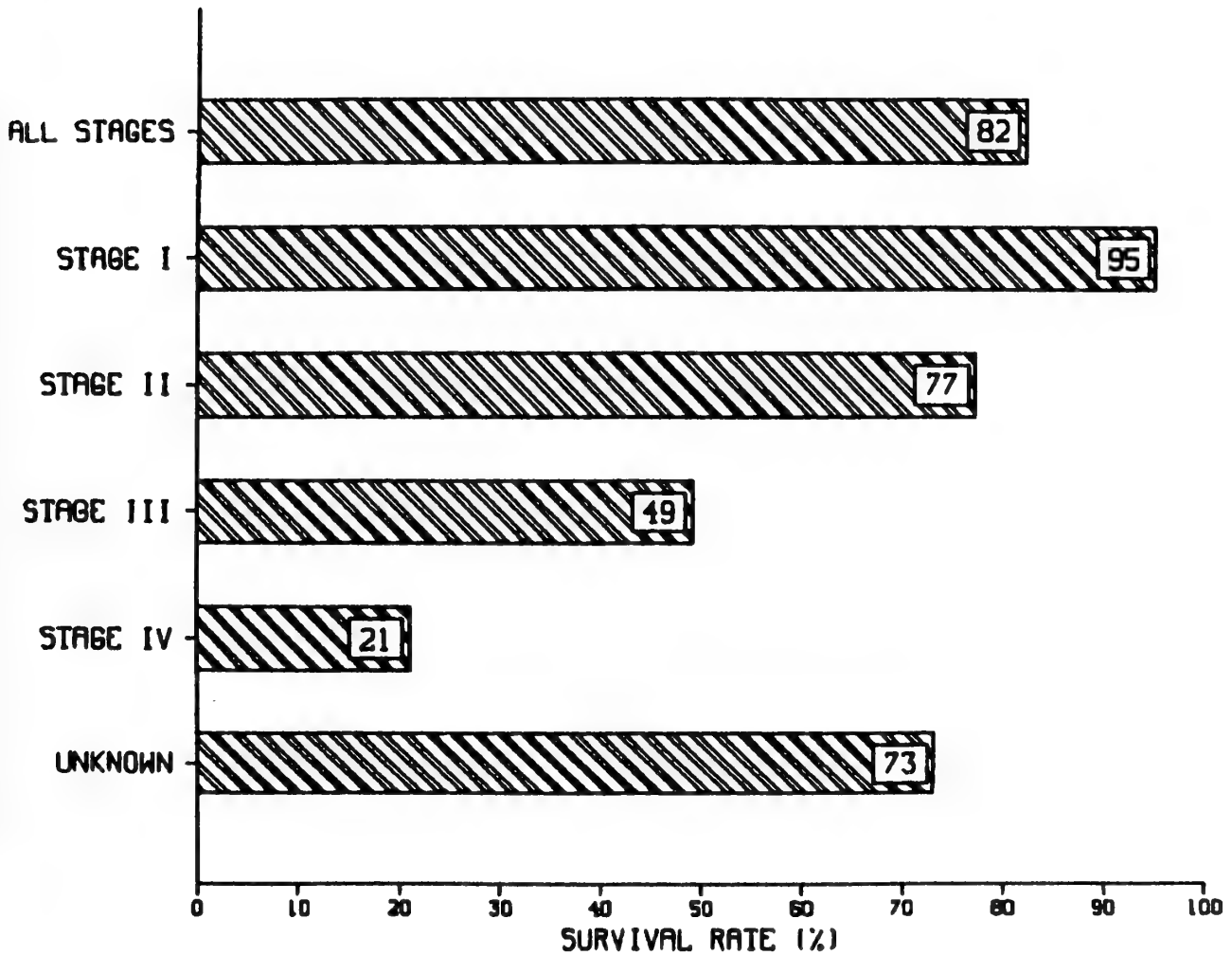


Figure VI-10

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Ovary

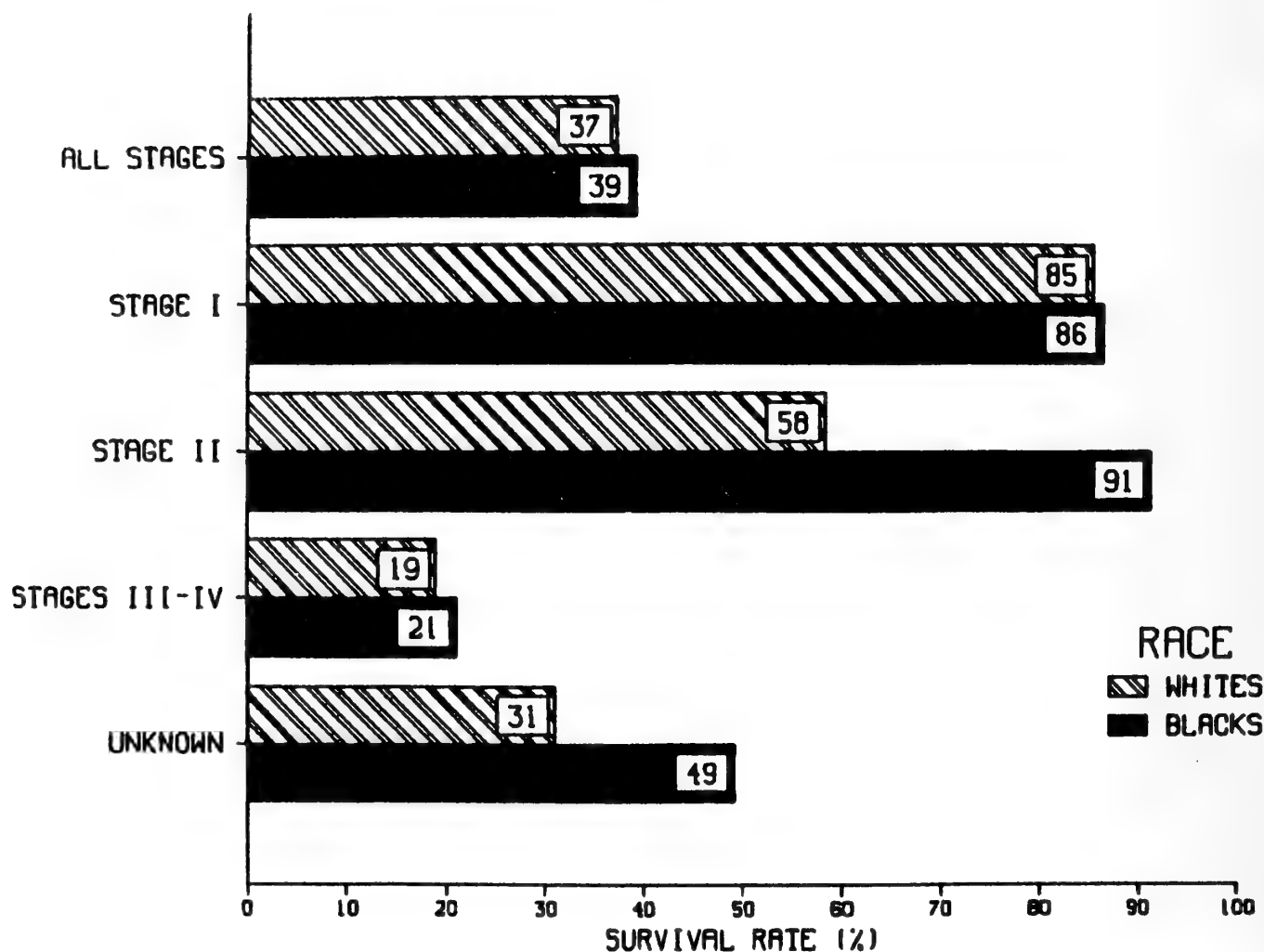




Figure VI-11

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

## Prostate

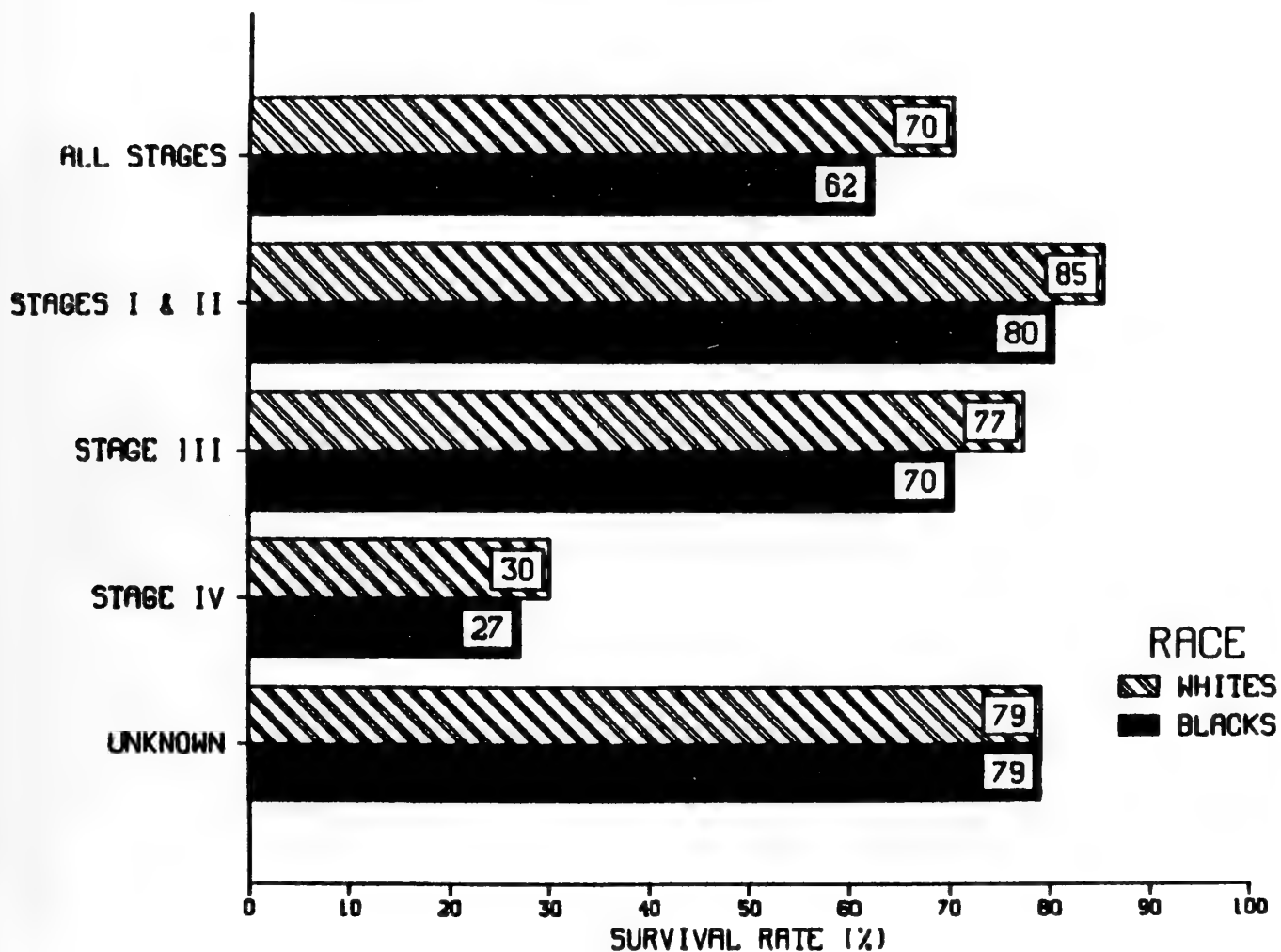


Figure VI-12

**Five-year Relative Survival Rates  
by Cancer Stage At Diagnosis: 1977-81  
(percent)**

**Rectum**

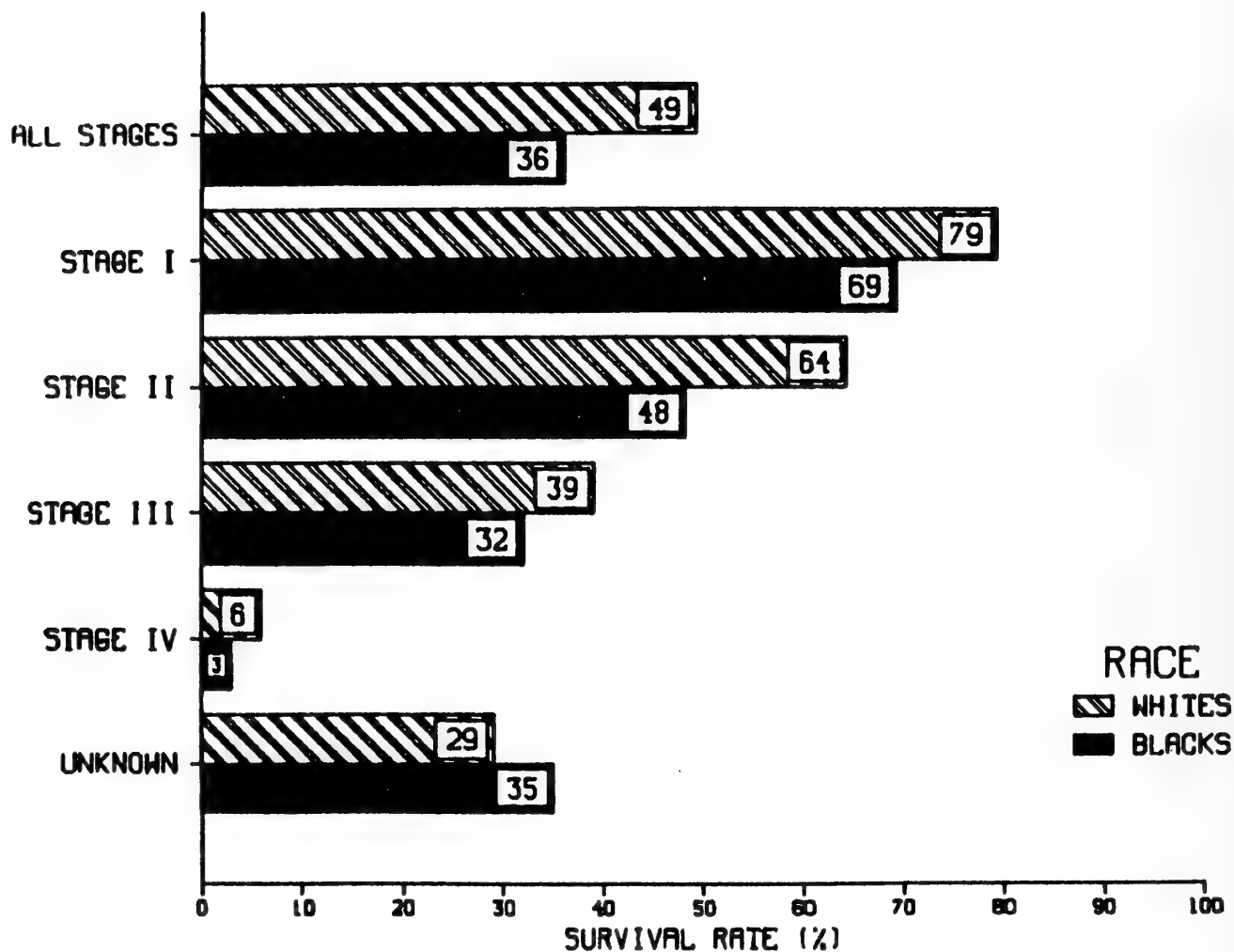
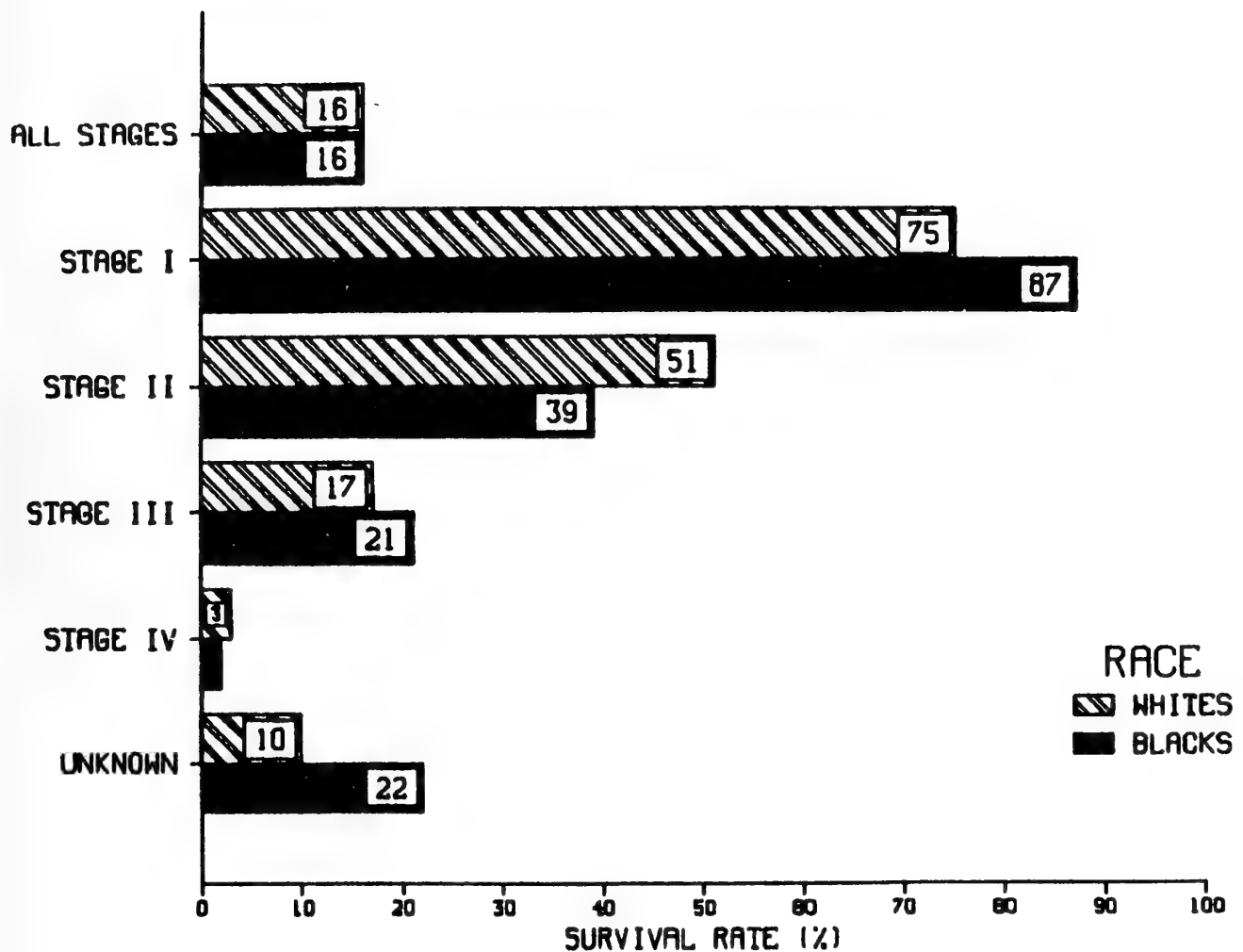


Figure VI-13

# Five-year Relative Survival Rates by Cancer Stage At Diagnosis: 1977-81 (percent)

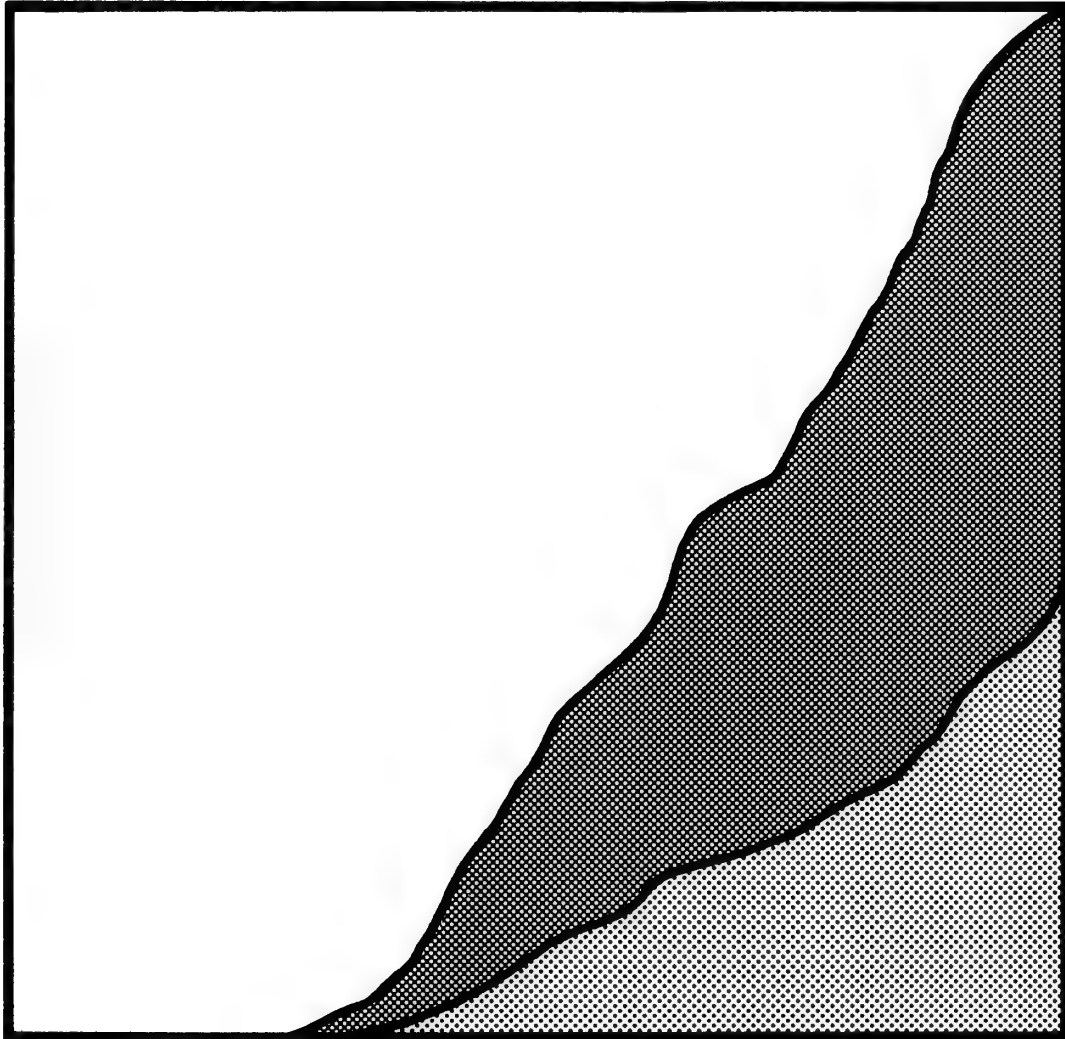
## Stomach





# Section VII.

## Distribution Of Histologic Types Of Cancer For Blacks And Whites





# TABLE OF CONTENTS

## SECTION VII. DISTRIBUTION OF HISTOLOGIC TYPES OF CANCER FOR BLACKS AND WHITES

	Page
<b>Discussion</b> .....	213
<i>Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites, SEER Program, 1978-81</i>	
Table VII-1. All Sites Combined .....	215
Table VII-2. Bladder .....	216
Table VII-3. Breast, Female .....	217
Table VII-4. Breast, Female <40 years of age .....	218
Table VII-5. Breast, Female 40+ years of age .....	219
Table VII-6. Cervix Uteri .....	220
Table VII-7. Colon .....	221
Table VII-8. Colon and Rectum .....	222
Table VII-9. Corpus Uteri .....	223
Table VII-10. Esophagus .....	224
Table VII-11. Larynx .....	225
Table VII-12. Lung, Male .....	226
Table VII-13. Lung, Female .....	227
Table VII-14. Ovary .....	228
Table VII-15. Pancreas .....	229
Table VII-16. Prostate .....	230
Table VII-17. Rectum .....	231
Table VII-18. Stomach .....	232





## **Section VII. Distribution of Histologic Types of Cancer for Blacks and Whites**

### **Discussion**

Information on the histologic distributions of cancer for selected cancer sites is presented in this section. Certain histologic types of cancer have been associated with favorable or poor survival prognosis. For example, more histologically aggressive or less differentiated cancers, such as sarcomas, have poorer survival than well-differentiated adenocarcinomas. Differences in the survival rates observed between blacks and whites for various cancer sites may be explained in part by differences in the distributions of histologic types. Therefore, histologic distributions may be used as a proxy measure of biologic differences in cancer between blacks and whites.

A set of 18 tables are presented in this section showing the percent of histologically confirmed tumors and percentage distributions of histologic types of cancers for selected sites for blacks and whites.

### **Highlights**

- Except for cancer of the pancreas, histologic confirmation of tumor types for both blacks and whites generally exceeds 90 percent.
- For cancers of the bladder and corpus uteri, blacks experience significantly lower survival rates than whites and have higher distributions of more aggressive histologic types of cancer.



Table VII-1

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## All Sites Combined

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	522,065	46,800
Number and Percent of cases microscopically confirmed	491,263 (94.1%)	43,898 (93.8%)
Adenocarcinoma, NOS	39.2%	39.1%
Squamous cell carcinoma	11.3	19.3
Carcinoma, NOS	5.3	6.6
Duct carcinoma	5.0	4.0
Non-Hodgkin's Lymphoma	4.8	3.0
Leukemia	4.3	3.8
Papillary adenocarcinoma	3.8	3.2
All Others	26.3	21.0
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-2

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Bladder

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	12,018	520
Number and Percent of cases microscopically confirmed	11,826 (98.4%)	508 (97.7%)
Carcinoma, NOS	1.8%	3.9%
Papillary adenocarcinoma	3.6	1.6
Squamous cell carcinoma	2.1	9.1
Transitional cell	36.0	41.4
Papillary transitional cell	54.5	36.2
All Others	2.0	7.9
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-3

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Breast, Female

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	35,220	2,648
Number and Percent of cases microscopically confirmed	34,375 (97.6%)	2,571 (97.1%)
Carcinoma, NOS	3.5%	3.9%
Papillary adenocarcinoma	10.3	11.5
Mucinous adenocarcinoma	2.2	2.3
Duct adenocarcinoma	69.5	65.2
Medullary carcinoma cell	3.0	6.8
Lobular carcinoma	8.3	5.7
Paget's disease	1.2	1.3
All Others	2.0	3.3
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-4

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Breast, Female <40 years of age

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	2,358	382
Number and Percent of cases microscopically confirmed	2,351 (99.7%)	380 (99.5%)
Duct adenocarcinoma	70.1%	65.2%
Medullary carcinoma	8.4	13.9
Adenocarcinoma, NOS	7.3	7.8
Lobular carcinoma	7.0	3.7
Carcinoma, NOS	3.4	3.9
All Others	3.8	5.5
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-5

**Percent Distribution of Cases by Histologic Type of  
Cancer for Blacks and Whites  
SEER Program, 1978-81**

**Breast, Female 40+ years of age**

<b>Number of Cases and Histologic Type</b>	<b>Whites</b>	<b>Blacks</b>
<b>Total number of cancer cases</b>	<b>32,247</b>	<b>2,216</b>
<b>Number and Percent of cases microscopically confirmed</b>	<b>31,409 (97.4%)</b>	<b>2,143 (96.7%)</b>
Duct adenocarcinoma	69.4%	65.1%
Adenocarcinoma, NOS	10.6	12.4
Lobular carcinoma	8.3	6.0
Carcinoma, NOS	3.5	3.9
Medullary carcinoma cell	2.6	5.5
Mucinous adenocarcinoma	2.3	2.4
All Others	3.3	4.7
	<u>100.0%</u>	<u>100.0%</u>

NOS = Not otherwise specified

Table VII-6

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Cervix Uteri

Number of Cases and Histologic Type	Whites	Blacks
<b>Total number of cancer cases</b>	<b>3,604</b>	<b>780</b>
<b>Number and Percent of cases microscopically confirmed</b>	<b>3,532 (98.0%)</b>	<b>766 (98.2%)</b>
Squamous cell carcinoma	76.6%	80.8%
Adenocarcinoma, NOS	8.8	3.8
Carcinoma, NOS	7.1	9.1
Adenosquamous carcinoma	2.3	1.7
All Others	5.2	4.6
	<u>100.0%</u>	<u>100.0%</u>

NOS = Not otherwise specified



Table VII-7

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Colon

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	27,196	2,263
Number and Percent of cases microscopically confirmed	25,564 (94.0%)	2,118 (93.6%)
Adenocarcinoma, NOS	80.0%	78.2%
Mucinous Adenocarcinoma	10.0	10.3
Papillary/villous adenocarcinoma	6.3	7.6
Carcinoma, NOS	2.3	1.8
All Others	1.4	2.1
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-8

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Colon and Rectum

Number of Cases and Histologic Type	Whites	Blacks
<b>Total number of cancer cases</b>	<b>38,816</b>	<b>2,970</b>
<b>Number and Percent of cases microscopically confirmed</b>	<b>36,798 (94.8%)</b>	<b>2,801 (94.3%)</b>
Adenocarcinoma, NOS	80.3%	77.4%
Mucinous adenocarcinoma	8.7	9.7
Papillary/villous adenocarcinoma	7.4	8.4
Carcinoma, NOS	2.0	1.8
All Others	1.6	2.7
	<u>100.0%</u>	<u>100.0%</u>

NOS = Not otherwise specified

Table VII-9

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Corpus Uteri

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	10,323	475
Number and Percent of cases microscopically confirmed	10,261 (99.4%)	470 (98.9%)
Carcinoma, NOS	2.1%	1.9%
Papillary adenocarcinoma	6.6	14.0
Adenocarcinoma, NOS	73.4	52.8
Adenosquamous carcinoma	10.8	8.7
Mullerian mixec tumor	1.9	7.0
Leiomyosarcoma	1.2	6.0
All Others	4.0	9.6
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-10

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Esophagus

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	2,262	734
Number and Percent of cases microscopically confirmed	2,099 (92.8%)	708 (96.5%)
Squamous cell carcinoma	72.8%	91.1%
Adenocarcinoma, NOS	16.6	1.1
Carcinoma, NOS	6.1	5.8
All Others	4.5	2.0
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-11

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Larynx

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	3,452	424
Number and Percent of cases microscopically confirmed	3,390 (98.2%)	417 (98.4%)
Squamous cell carcinoma	94.9%	96.9%
Papillary/villous adenocarcinoma	2.2	1.0
Carcinoma, NOS	1.4	1.7
All Others	1.5	0.4
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-12

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Lung, Male

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	26,716	3,276
Number and Percent of cases microscopically confirmed	24,125 (90.3%)	3,034 (92.6%)
Squamous cell carcinoma	35.9%	41.1%
Adenocarcinoma, NOS	19.7	19.4
Carcinoma, NOS	18.8	19.3
Small/oat cell carcinoma	16.9	11.9
Bronchiolo-alveolar carcinoma	2.4	1.8
All Others	6.3	6.5
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-13

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Lung, Female

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	11,646	1,074
Number and Percent of cases microscopically confirmed	10,621 (91.2%)	979 (91.2%)
Adenocarcinoma, NOS	26.9%	30.3%
Squamous cell carcinoma	20.9	23.0
Small/oat cell carcinoma	19.4	13.3
Carcinoma, NOS	19.1	19.0
Bronchiolo-alveolar carcinoma	4.9	4.1
Mucinous adenocarcinoma	2.9	1.6
All Others	5.9	8.7
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-14

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Ovary

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	5,567	348
Number and Percent of cases microscopically confirmed	5,394 (96.9%)	331 (95.1%)
Cystadenocarcinoma	40.7%	43.2%
Adenocarcinoma, NOS	16.3	13.6
Papillary/villous adenocarcinoma	14.9	13.9
Endometrioid carcinoma	8.6	4.8
Carcinoma, NOS	5.3	2.7
Mucinous adenocarcinoma	3.2	2.4
All Others	11.0	19.4
	100.0%	100.0%

NOS = Not otherwise specified



Table VII-15

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Pancreas

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	6,901	817
Number and Percent of cases microscopically confirmed	5,107 (74.0%)	627 (76.7%)
Adenocarcinoma, NOS	69.9%	70.6%
Carcinoma, NOS	14.0	11.2
Mucinous adenocarcinoma	6.2	8.3
Duct adenocarcinoma	3.1	2.4
Islet cell carcinoma	1.7	2.9
All Others	5.1	4.6
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-16

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Prostate

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	23,740	2,864
Number and Percent of cases microscopically confirmed	22,577 (95.1%)	2,709 (94.6%)
Adenocarcinoma, NOS	94.3%	94.5%
Carcinoma, NOS	4.0	3.9
All Others	1.7	1.6
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-17

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Rectum

Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	11,620	707
Number and Percent of cases microscopically confirmed	11,248 (96.8%)	685 (96.9%)
Adenocarcinoma, NOS	80.9%	75.2%
Papillary adenocarcinoma	10.1	10.7
Mucinous adenocarcinoma	5.9	7.9
Carcinoma, NOS	1.4	1.6
All Others	1.7	4.6
	100.0%	100.0%

NOS = Not otherwise specified

Table VII-18

# Percent Distribution of Cases by Histologic Type of Cancer for Blacks and Whites SEER Program, 1978-81

## Stomach

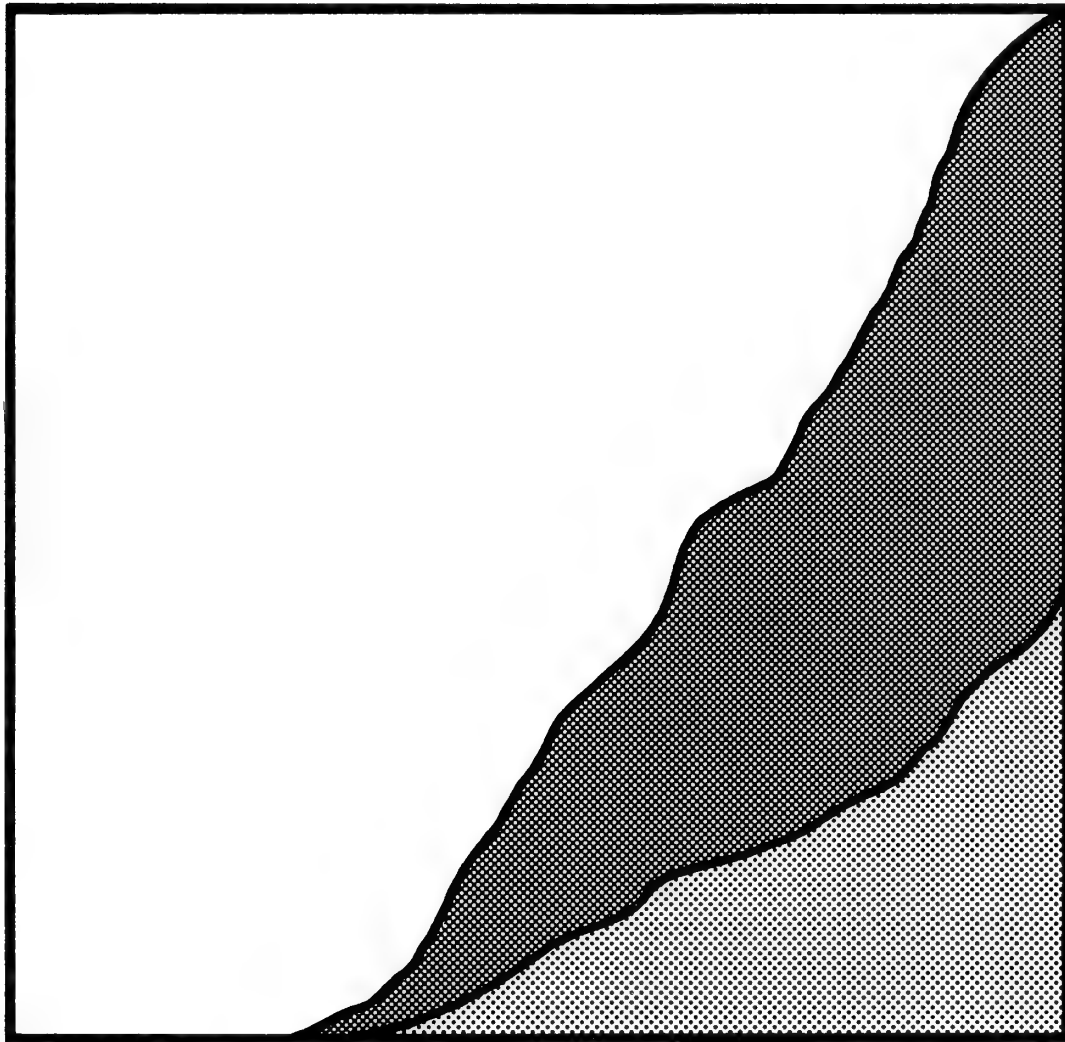
Number of Cases and Histologic Type	Whites	Blacks
Total number of cancer cases	6,295	834
Number and Percent of cases microscopically confirmed	5,798 (92.1%)	788 (94.5%)
Adenocarcinoma, NOS	77.4%	75.4%
Carcinoma, NOS	6.4	5.8
Mucinous adenocarcinoma	6.0	5.0
Signet ring carcinoma	4.3	4.6
Leiomyosarcoma	1.8	3.9
All Others	4.1	5.3
	100.0%	100.0%

NOS = Not otherwise specified

# **Section VIII.**

## **Cancer Trends:**

### **Comparison Of Incidence, Mortality, And Survival For Blacks And Whites**





# TABLE OF CONTENTS

## SECTION VIII. CANCER TRENDS: COMPARISON OF INCIDENCE, MORTALITY, AND SURVIVAL FOR BLACKS AND WHITES

	Page
<b>Discussion</b> . . . . .	237
 <i>Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81</i>	
Figure VIII-1. All Sites Combined, Black . . . . .	240
Figure VIII-2. All Sites Combined, White . . . . .	241
Figure VIII-3. Bladder, Black . . . . .	242
Figure VIII-4. Bladder, White . . . . .	243
Figure VIII-5. Breast, Female, Black . . . . .	244
Figure VIII-6. Breast, Female, White . . . . .	245
Figure VIII-7. Cervix Uteri, Black . . . . .	246
Figure VIII-8. Cervix Uteri, White . . . . .	247
Figure VIII-9. Colon, Black . . . . .	248
Figure VIII-10. Colon, White . . . . .	249
Figure VIII-11. Colon and Rectum, Black . . . . .	250
Figure VIII-12. Colon and Rectum, White . . . . .	251
Figure VIII-13. Corpus Uteri, Black . . . . .	252
Figure VIII-14. Corpus Uteri, White . . . . .	253
Figure VIII-15. Esophagus, Black . . . . .	254
Figure VIII-16. Esophagus, White . . . . .	255
Figure VIII-17. Larynx, Black . . . . .	256
Figure VIII-18. Larynx, White . . . . .	257
Figure VIII-19. Lung and Bronchus, Black Male . . . . .	258
Figure VIII-20. Lung and Bronchus, White Male . . . . .	259
Figure VIII-21. Lung and Bronchus, Black Female . . . . .	260
Figure VIII-22. Lung and Bronchus, White Female . . . . .	261
Figure VIII-23. Multiple Myeloma, Black . . . . .	262
Figure VIII-24. Multiple Myeloma, White . . . . .	263
Figure VIII-25. Ovary, Black . . . . .	264
Figure VIII-26. Ovary, White . . . . .	265
Figure VIII-27. Pancreas, Black . . . . .	266
Figure VIII-28. Pancreas, White . . . . .	267
Figure VIII-29. Prostate, Black . . . . .	268
Figure VIII-30. Prostate, White . . . . .	269
Figure VIII-31. Rectum, Black . . . . .	270
Figure VIII-32. Rectum, White . . . . .	271
Figure VIII-33. Stomach, Black . . . . .	272
Figure VIII-34. Stomach, White . . . . .	273





## **Section VIII. Cancer Trends: Comparison of Incidence, Mortality, and Survival for Blacks and Whites**

### **Discussion**

This section illustrates the complex set of interrelationships among cancer incidence, survival, and mortality for blacks and whites. As indicated earlier, cancer incidence rates measure the rate of occurrence of new cases of cancer during a year per 100,000 persons in the population; cancer mortality rates measure the rate of deaths during the year with cancer given as the underlying cause of death per 100,000 population; and cancer patient survival rates measure the percent of cases, first diagnosed during a particular period of time, that survive for specific lengths of time following diagnosis, usually adjusted for the effect of deaths from other causes. The survival rate for a particular cancer can be affected by changes in the incidence of that cancer. Changes in incidence and/or survival for a particular cancer over time can result in changes in the mortality rate for that cancer. The following examples illustrate some of the relationships among these measures.

- The incidence rate for a specific cancer can change over time due to changes in the prevalence of risk factors for that cancer. For example, increases in the prevalence of cigarette smoking among white males during the first half of this century resulted in sharp increases in the incidence of lung cancer. Changes in smoking practices, particularly following the Surgeon General's report on smoking in 1964, have resulted in a decrease in the incidence of lung cancer among white males under 45 years of age in the past few years; there is an indication that this trend is beginning to extend to older age groups.
- Among cancers with low survival rates, such as lung cancer, increases in incidence rates are accompanied, with a very short time lag, by corresponding increases in mortality rates.
- If an increasing number of less severe cases of a particular cancer are identified, this will have the effect of increasing the five-year relative survival rate for that cancer. For example, this may be the explanation for the increase in five-year relative survival rates for melanoma among whites which has accompanied a rapid increase in incidence over the past few years.
- An improvement in survival rates over time, particularly in the absence of any changes in the incidence rate, will result in decreases in the mortality rate. A dramatic example of this occurred in the mid-1970s when a sharp reduction in mortality from testicular cancer was observed due to a major increase in the survival rate for that cancer.



The data presented in this section pertain to the period covered by the SEER Program. For each cancer, the five-year relative survival rate is presented for black and white patients first diagnosed during each year 1973-77. The corresponding SEER incidence rates and U.S. mortality rates are presented for each year 1973-81. (Mortality rates for all SEER areas combined, for each cancer site, follow very closely those for the United States.) By examining these three measures on a single page, for a given cancer, the reader can obtain a better understanding of the trends for that cancer than would be possible by examining each of these measures in isolation. The reader should be cautioned, however, that the observed measures for a particular time period are also influenced by events occurring during that time period. Because of long latent periods for the effect of some risk factors to appear as cancers, the incidence rate for a particular cancer may increase or decrease due to changes in the risk factors a number of years earlier. The number of persons dying of a particular cancer during a given year include not only those who are first diagnosed during that year, but also a number who had been diagnosed in earlier years. Care should be used when comparing the graphs between blacks and whites because the vertical axes are not always identical. These factors must be kept in mind when reviewing the data on the following pages.

Figure VIII-1

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## All Sites Combined Black

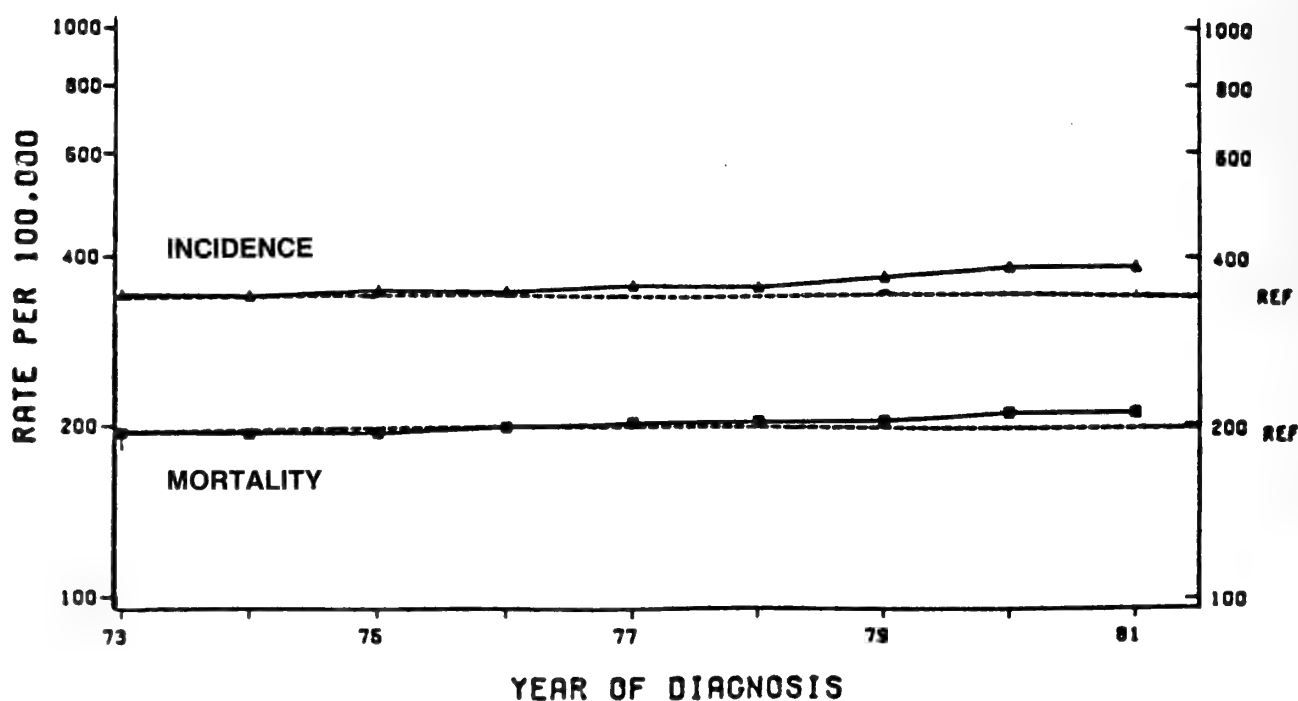
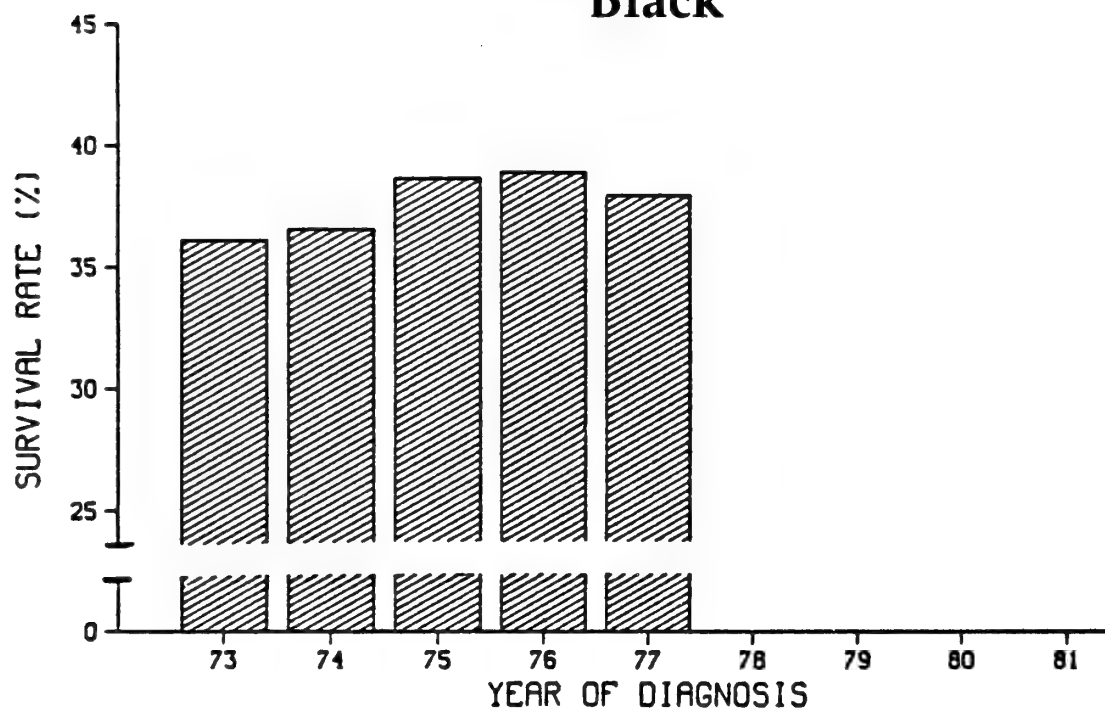


Figure VIII-2

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## All Sites Combined White

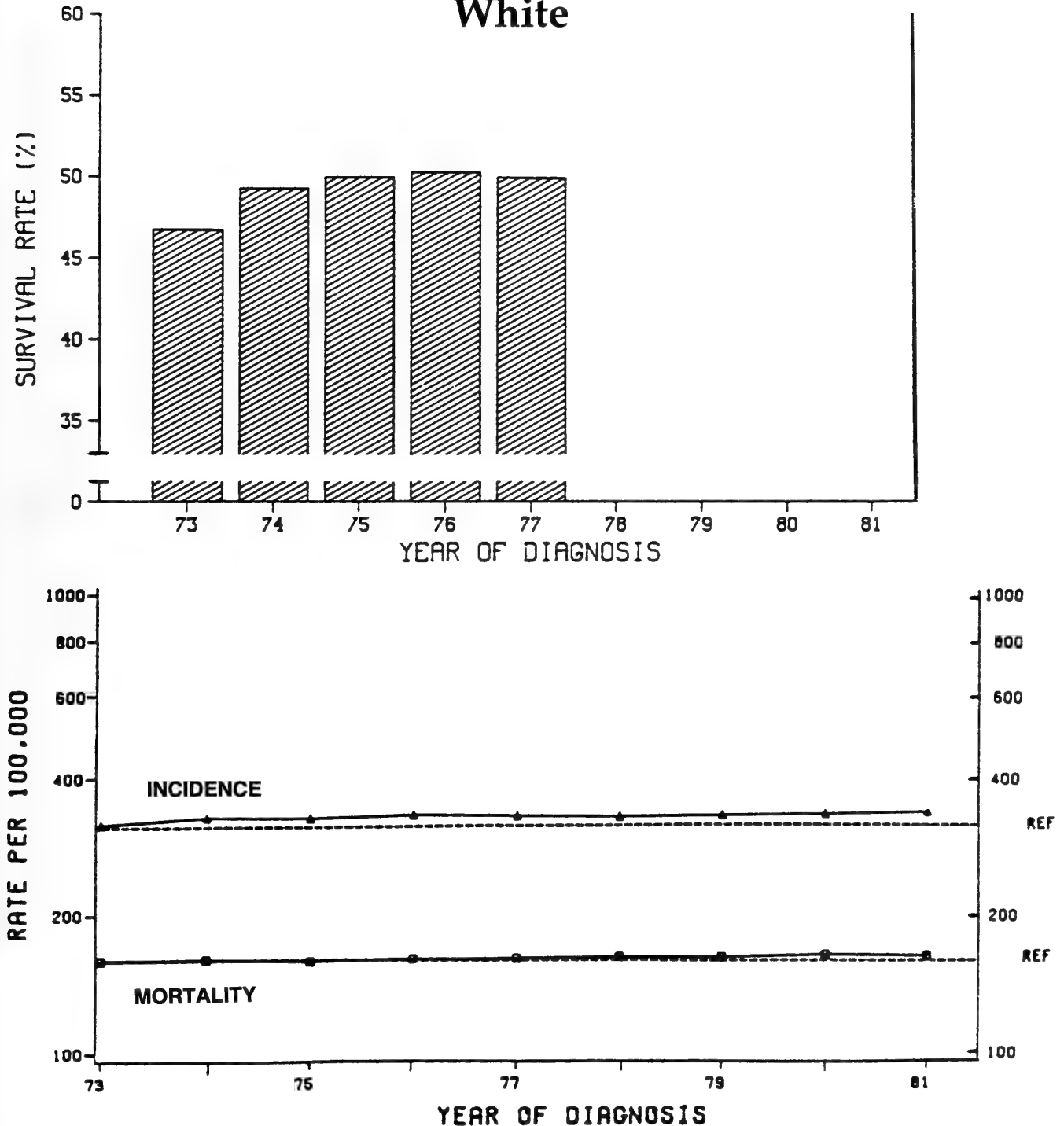


Figure VIII-3

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

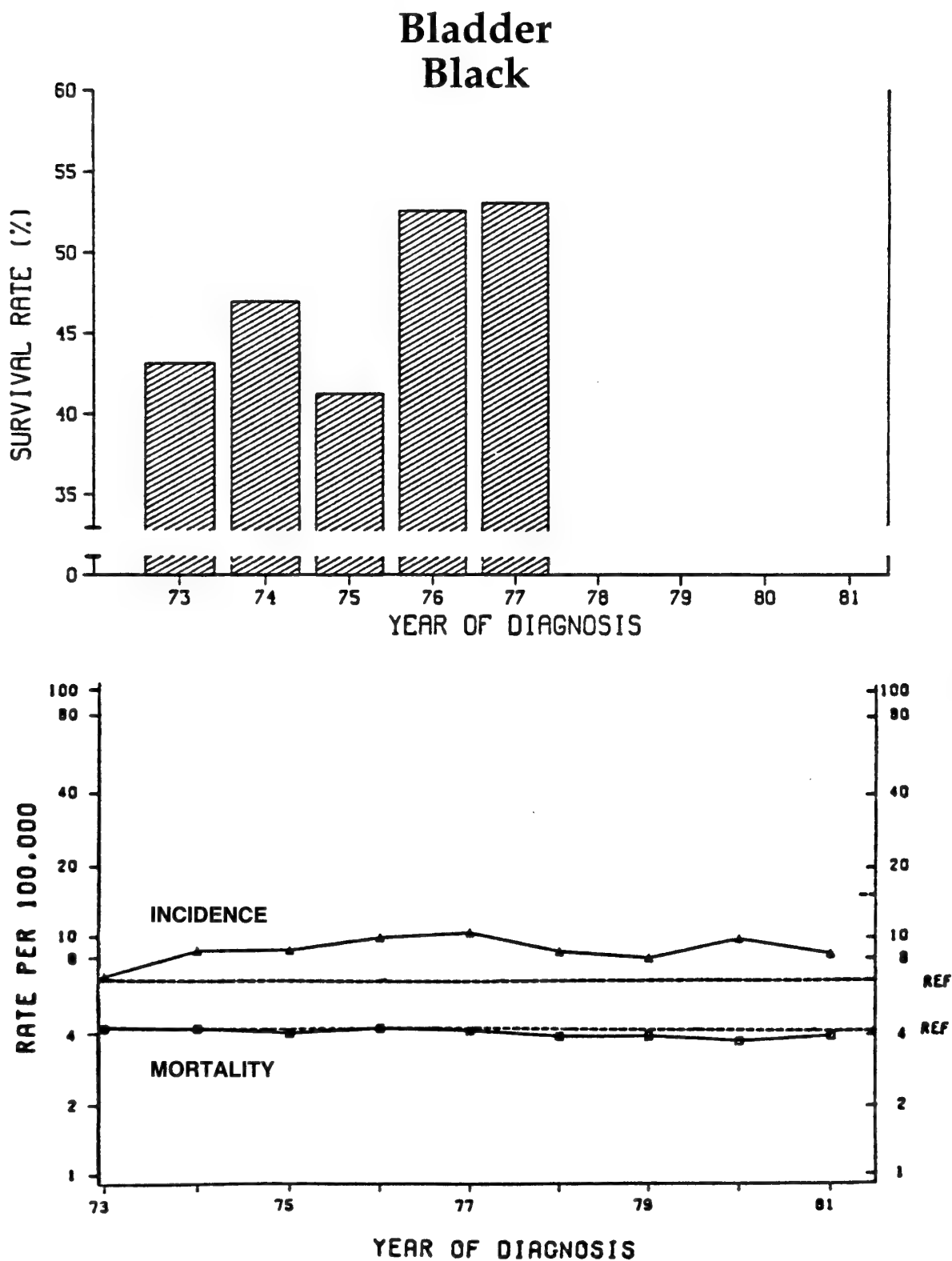


Figure VIII-4

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

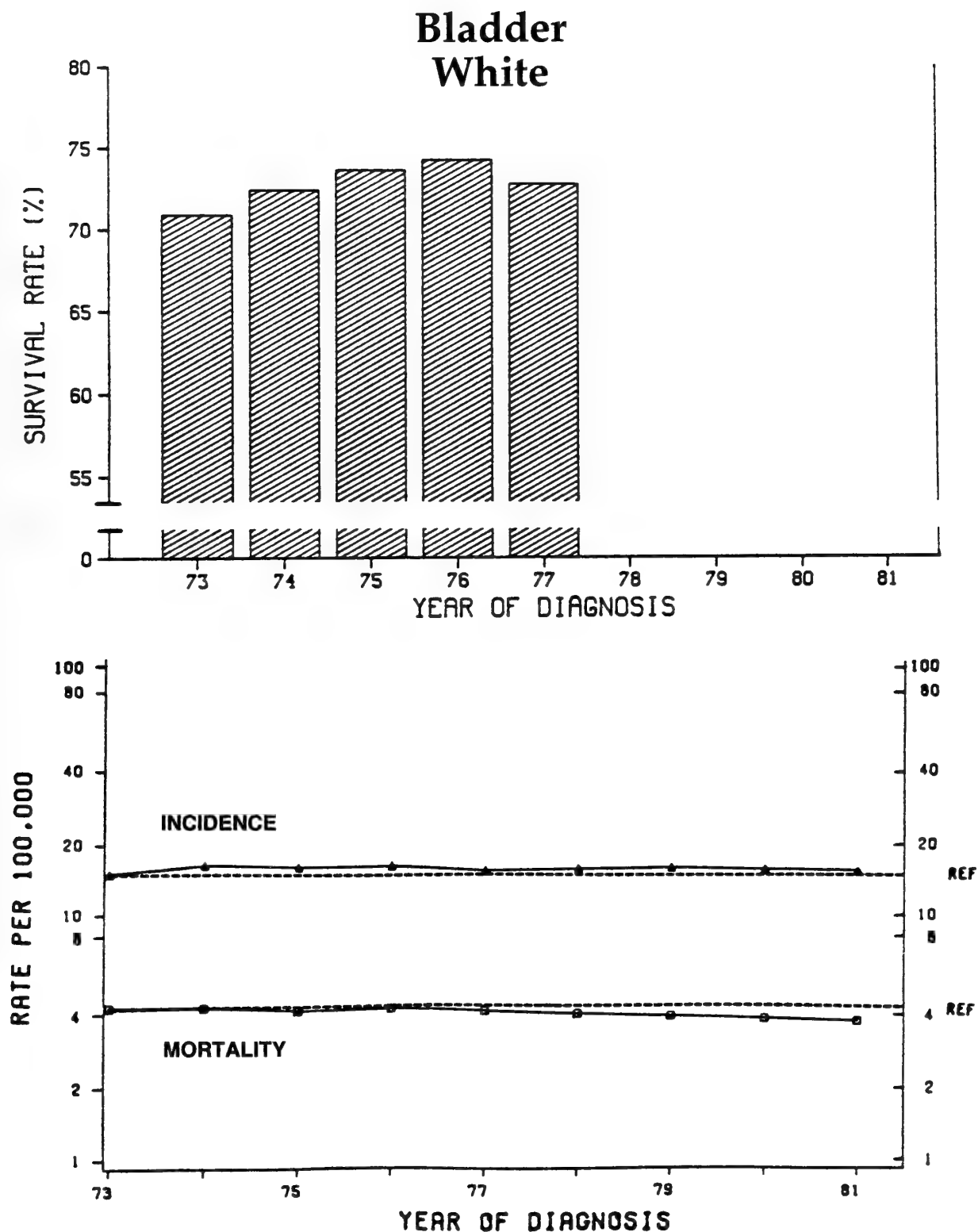


Figure VIII-5

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Breast Female, Black

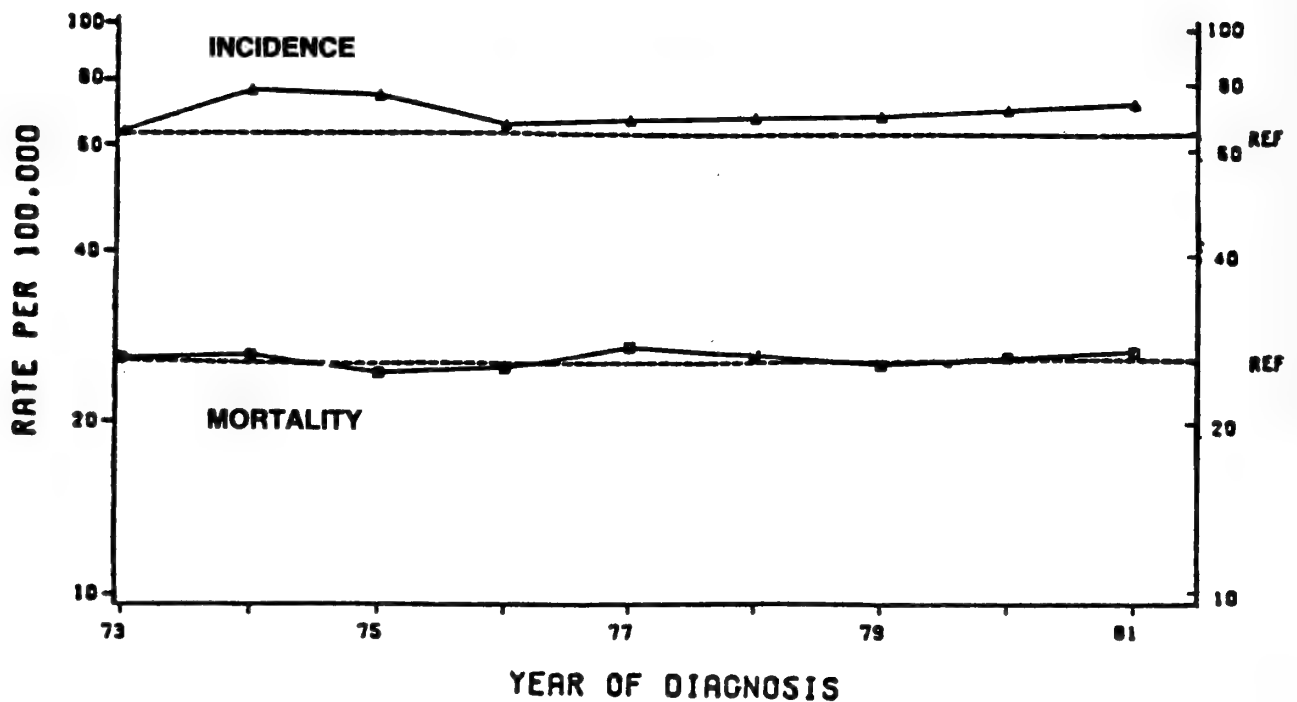
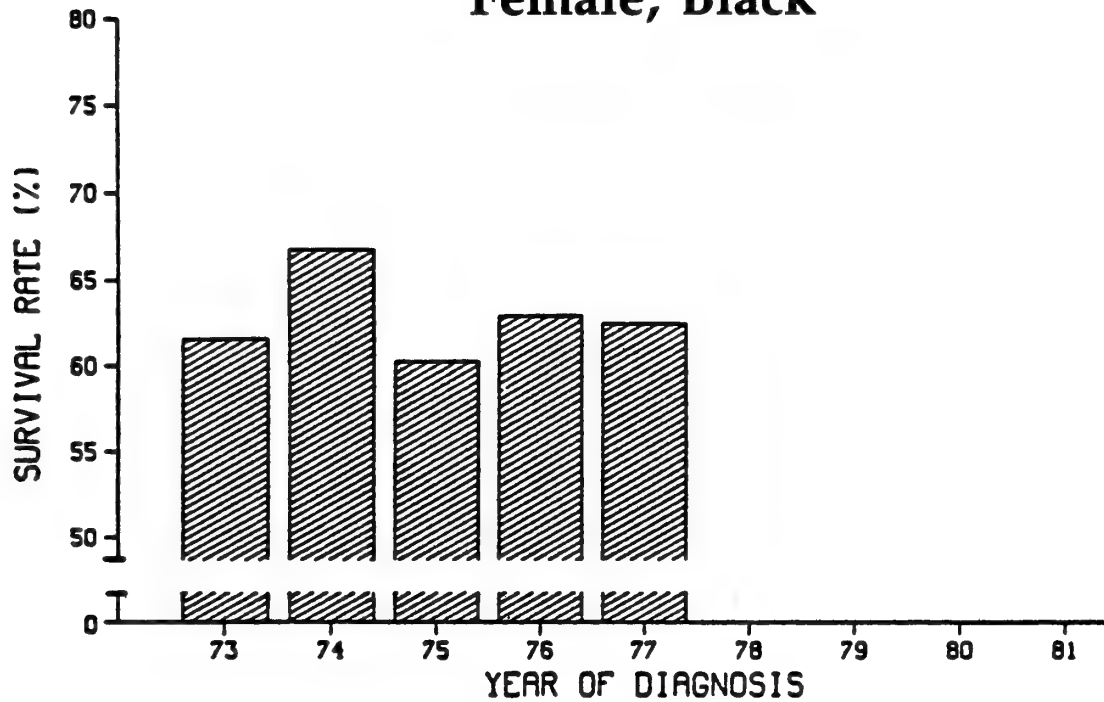




Figure VIII-6

**Five-year Relative Survival Rates and  
Age-adjusted Incidence and Mortality Rates per 100,000  
by Year of Diagnosis: 1973-81**

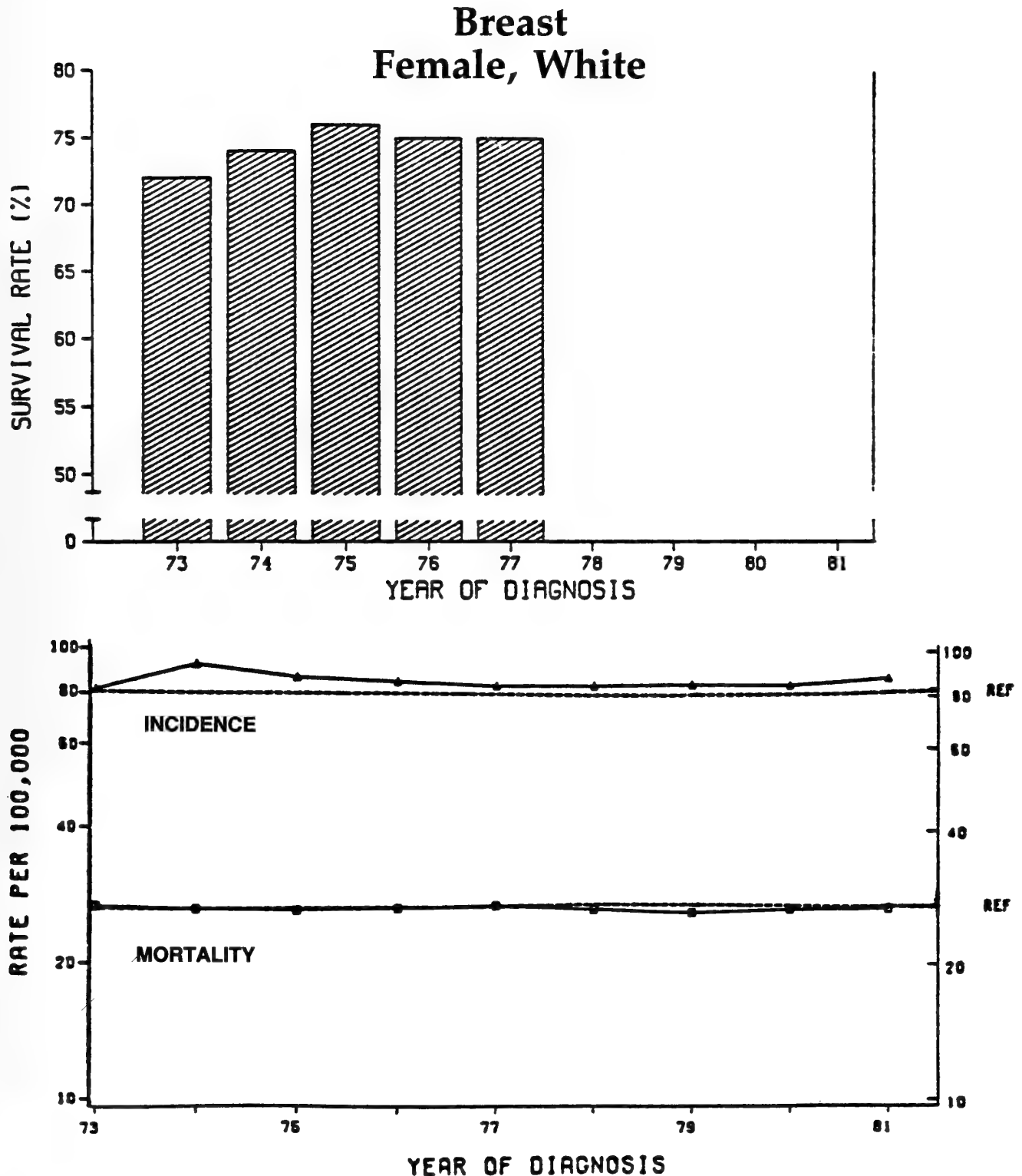


Figure VIII-7

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

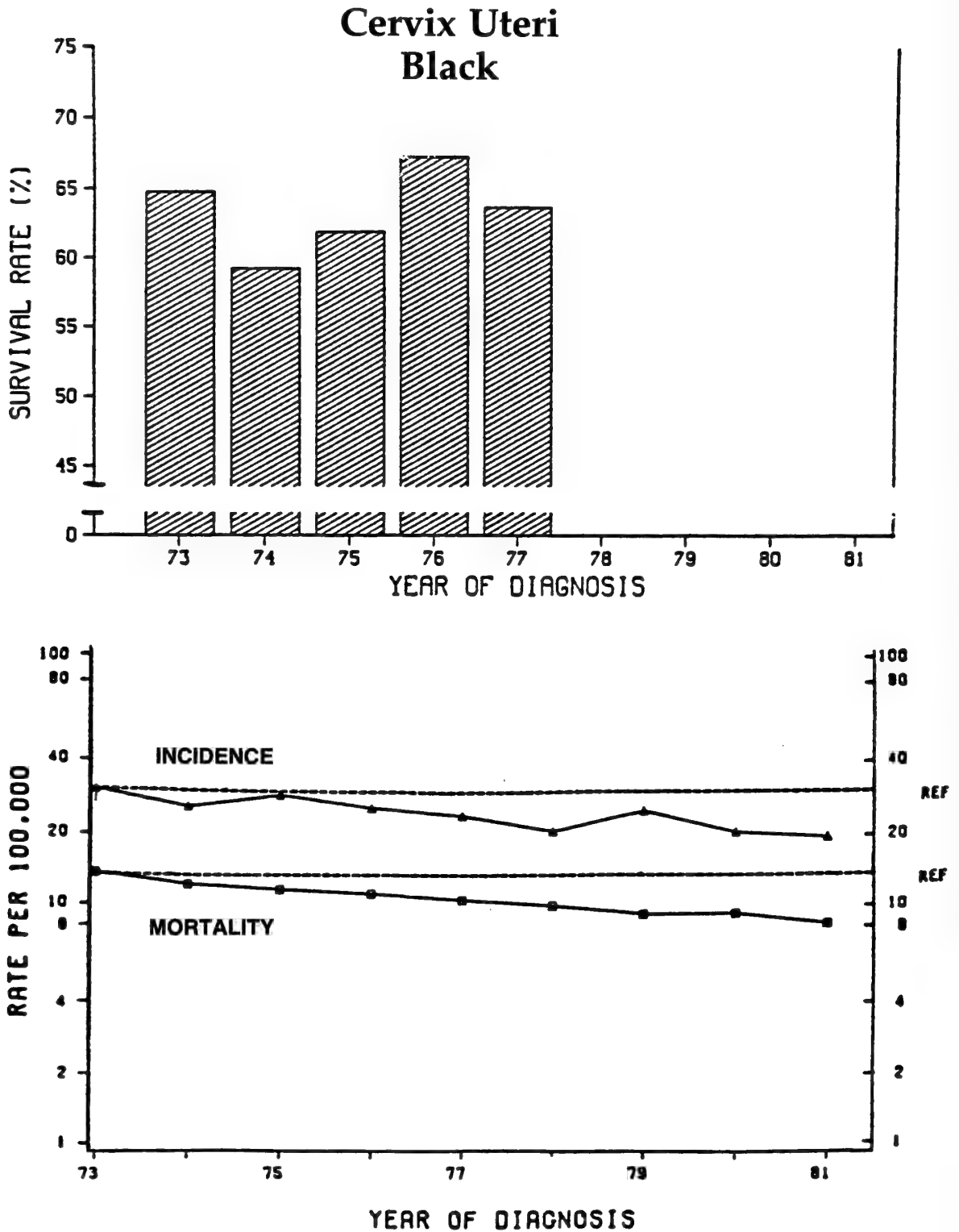


Figure VIII-8

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

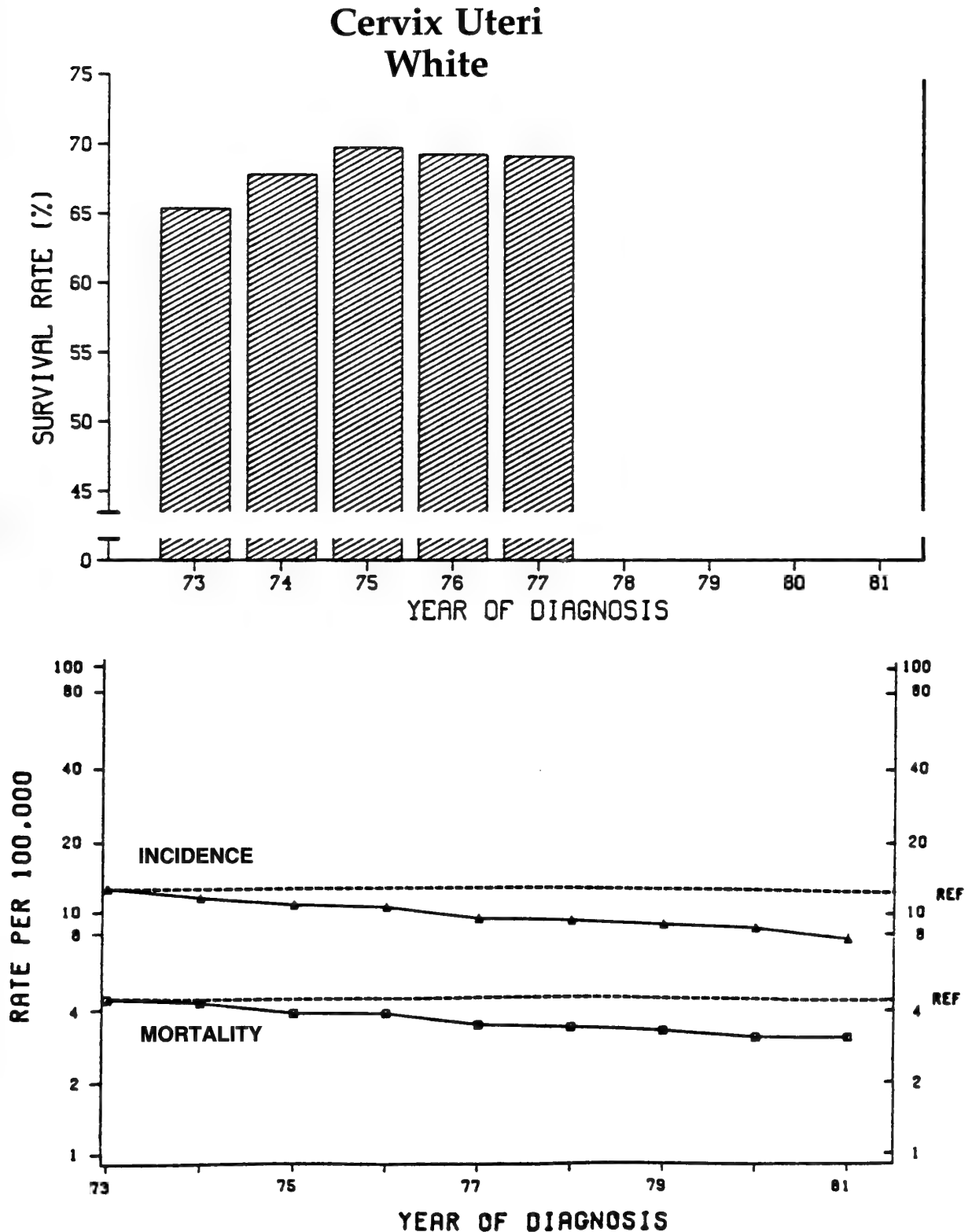


Figure VIII-9

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Colon Black

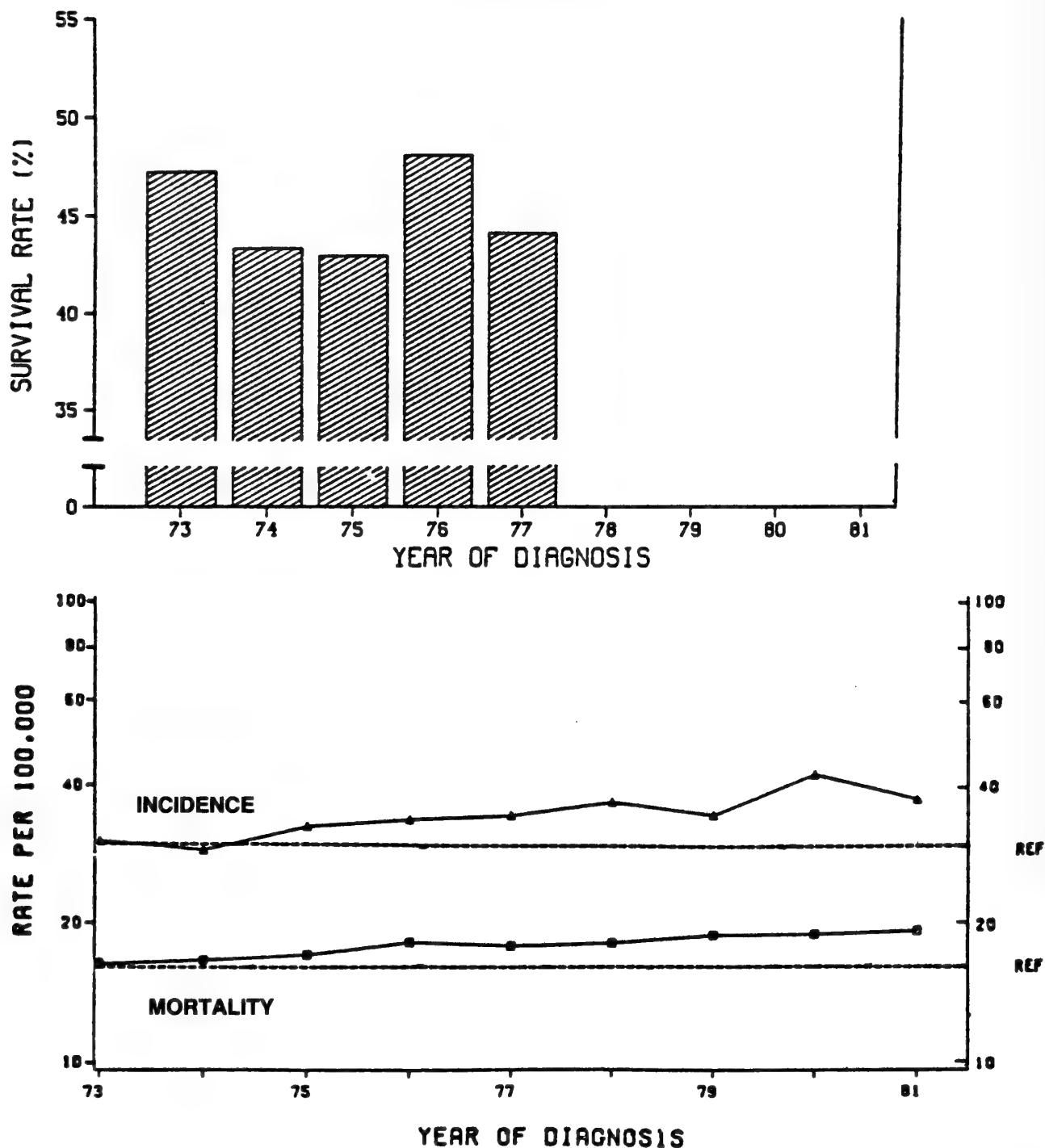


Figure VIII-10

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

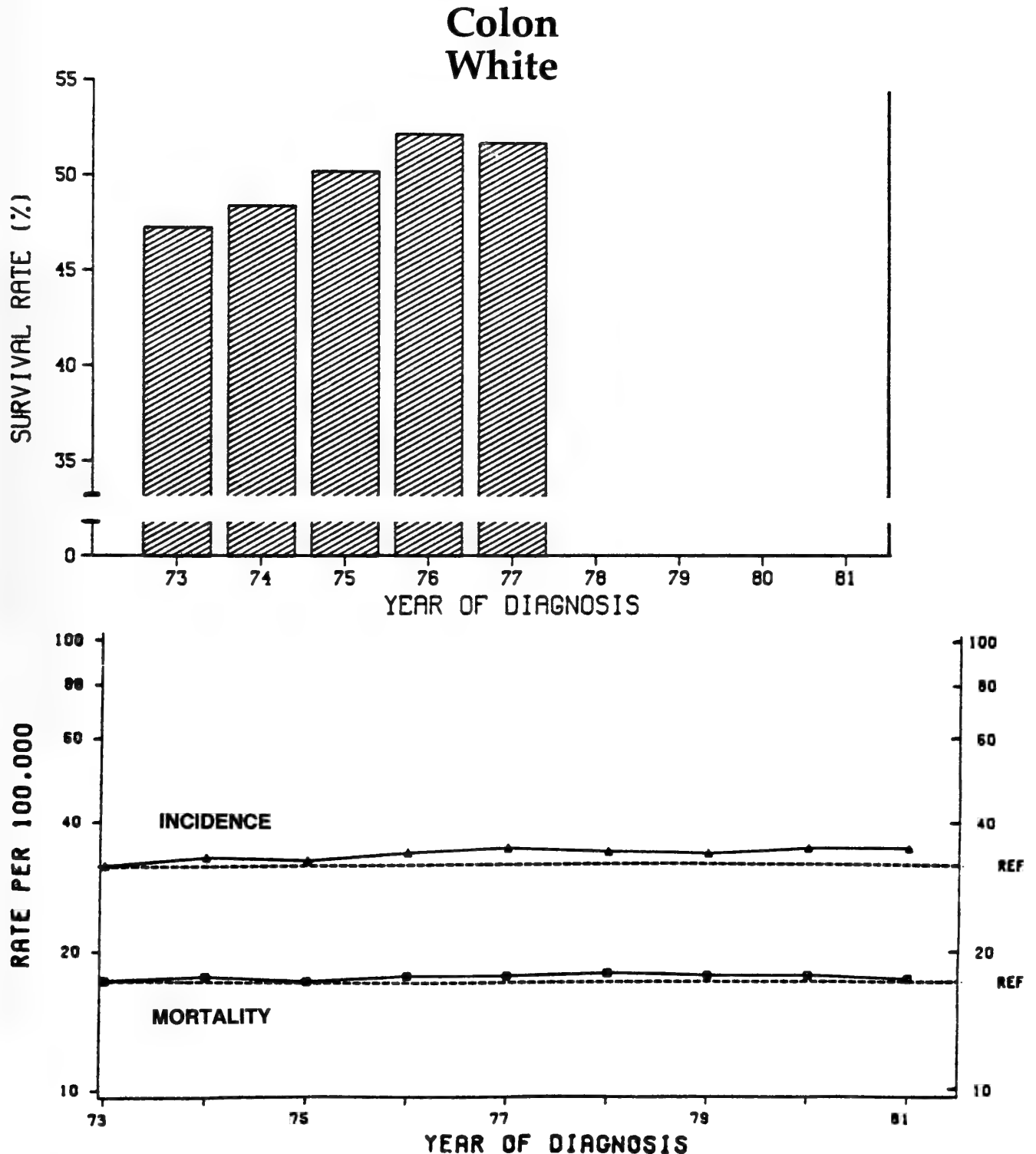


Figure VIII-11

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Colon and Rectum Black

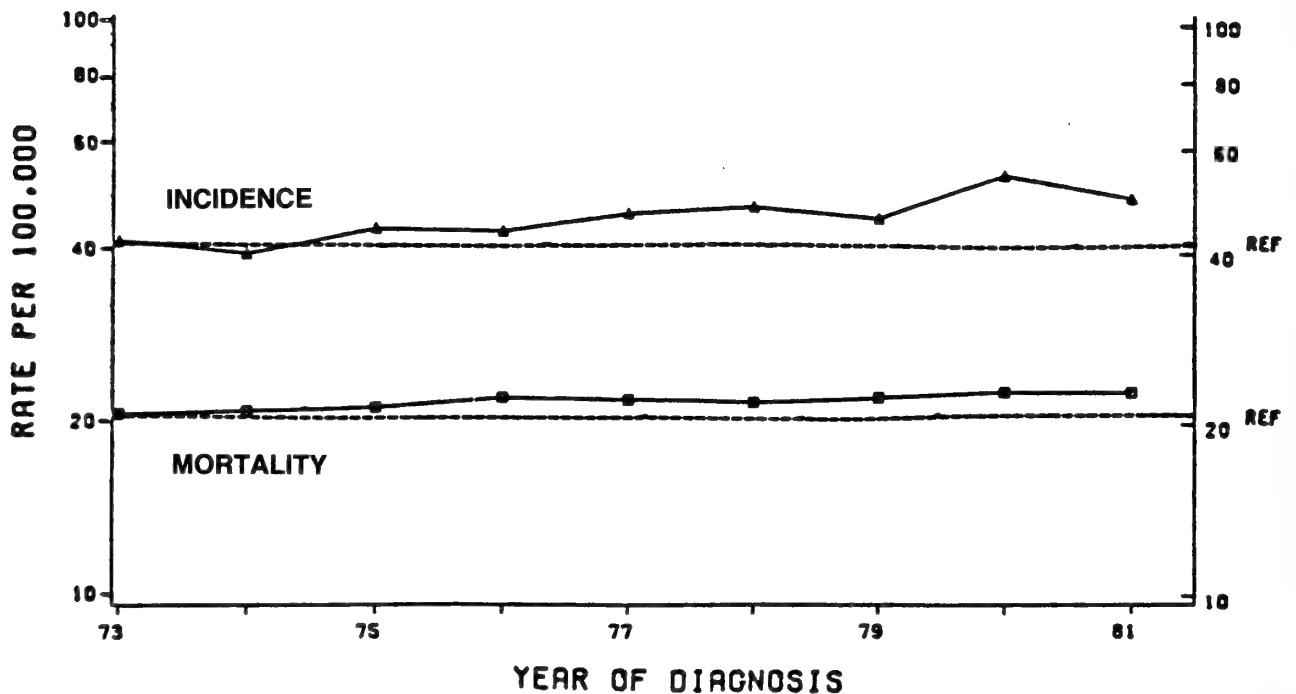
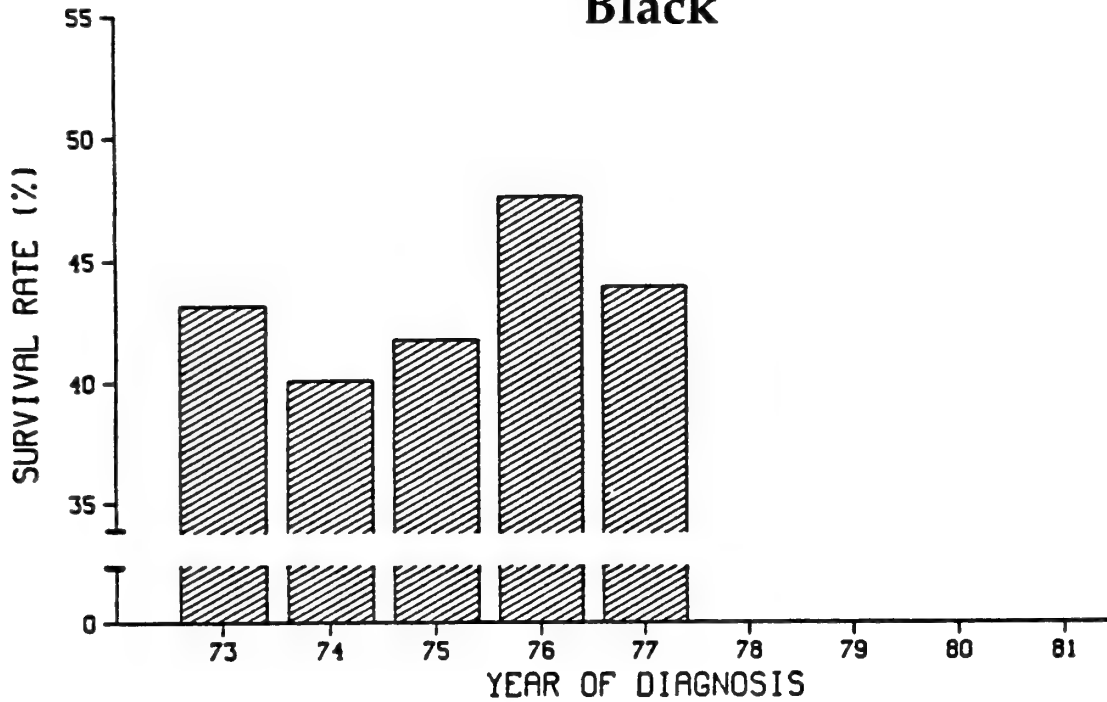


Figure VIII-12

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Colon and Rectum White

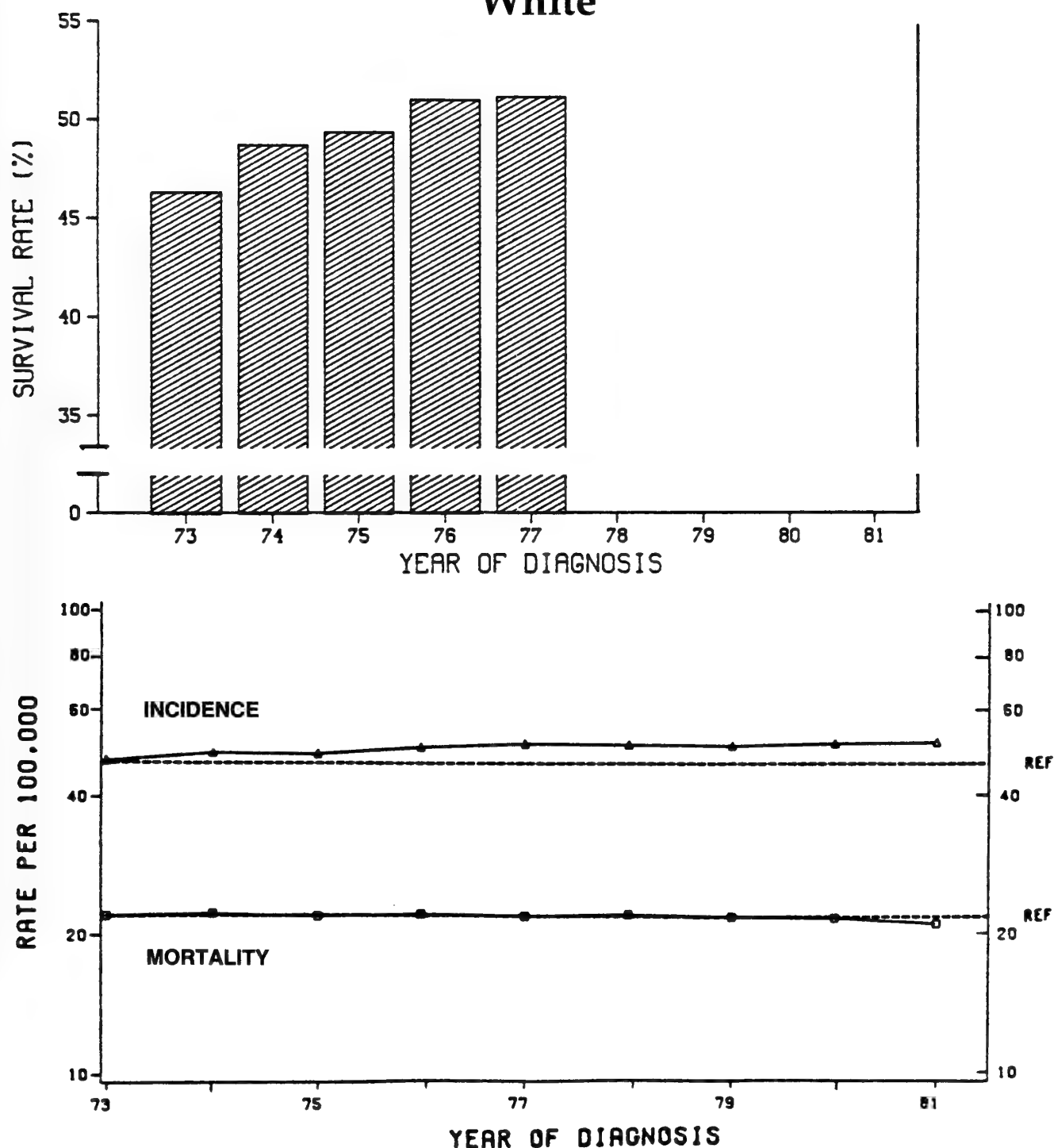


Figure VIII-13

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Corpus Uteri Black

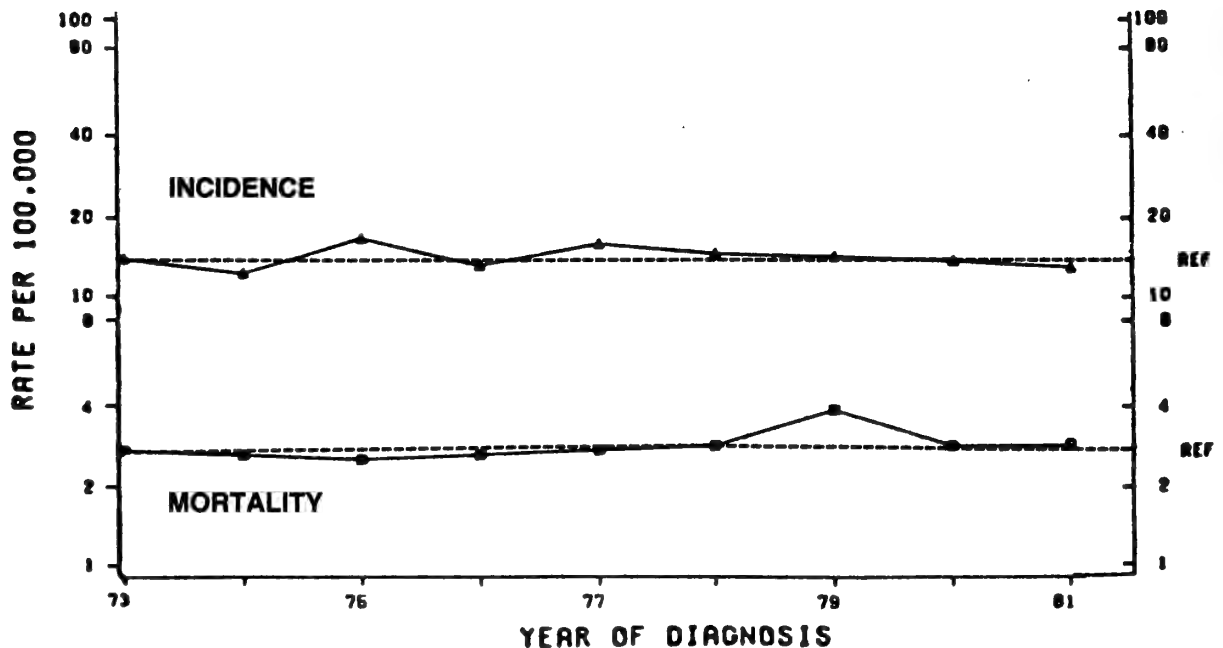
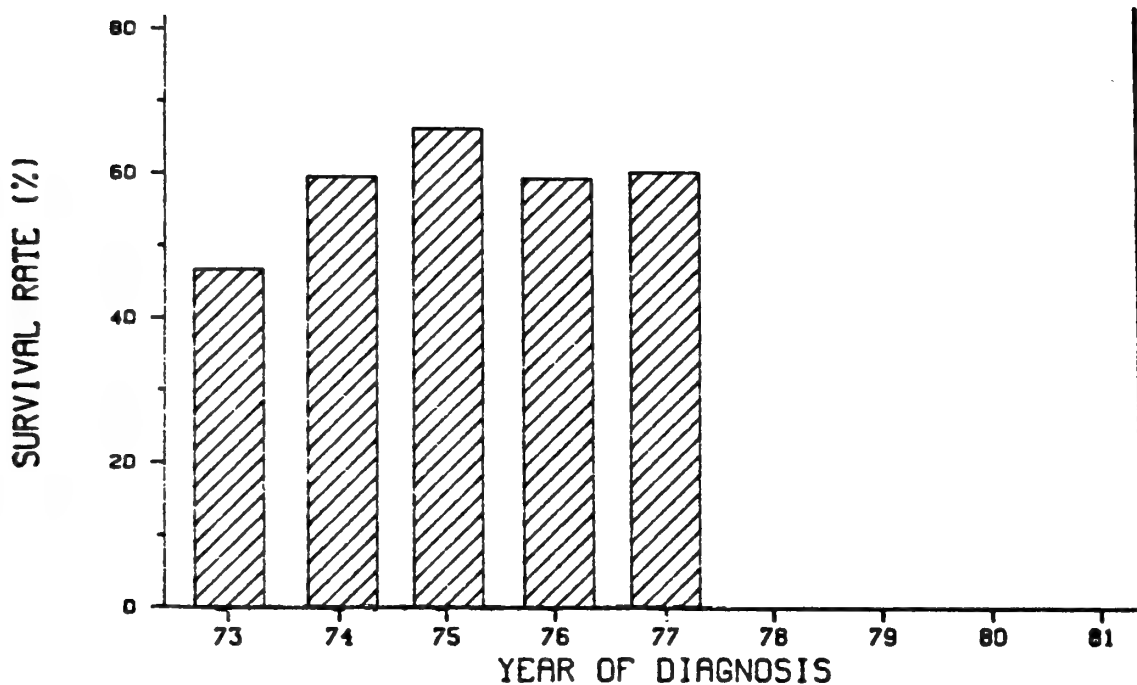




Figure VIII-14

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Corpus Uteri White

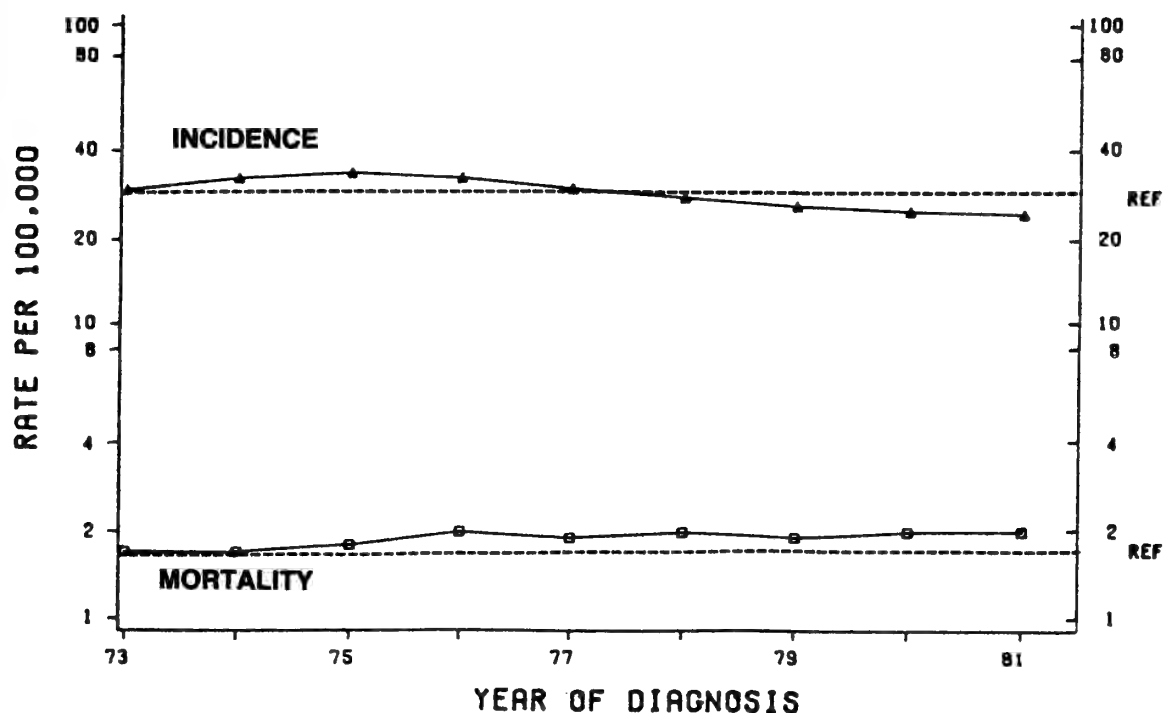
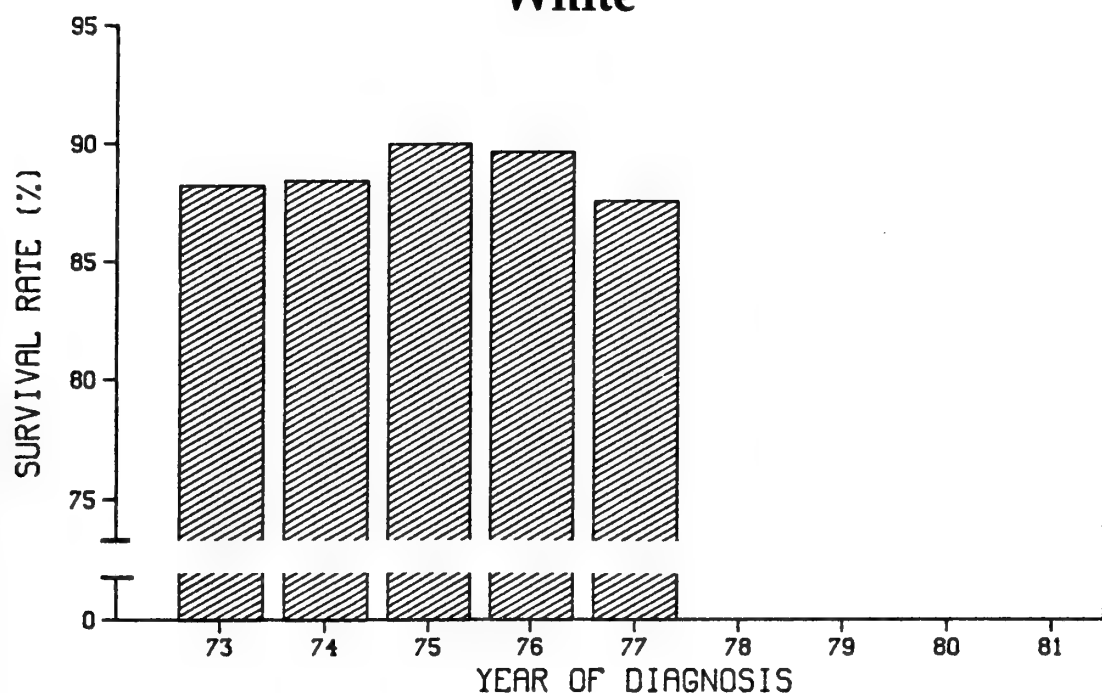


Figure VIII-15

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Esophagus Black

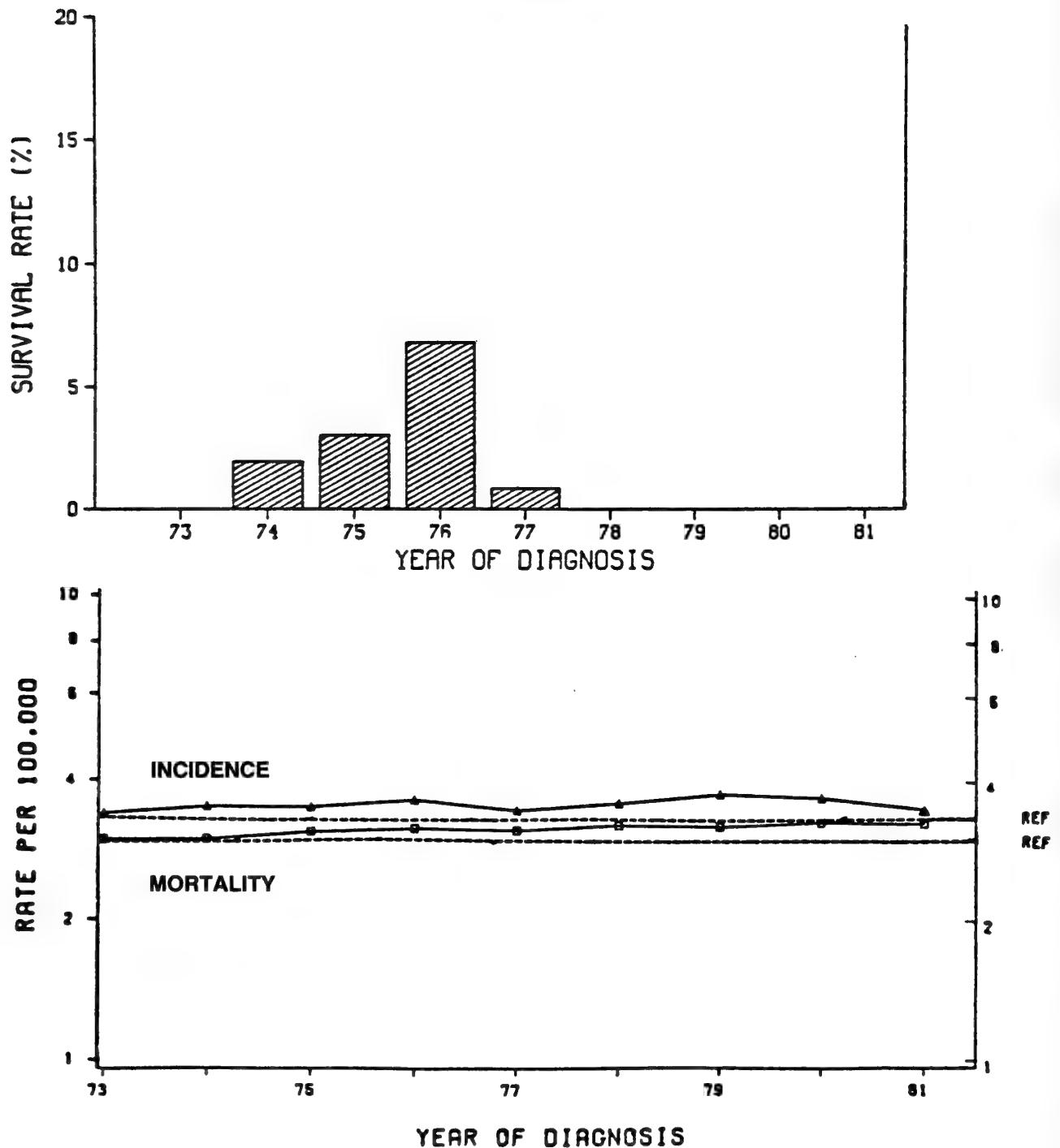


Figure VIII-16

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Esophagus White

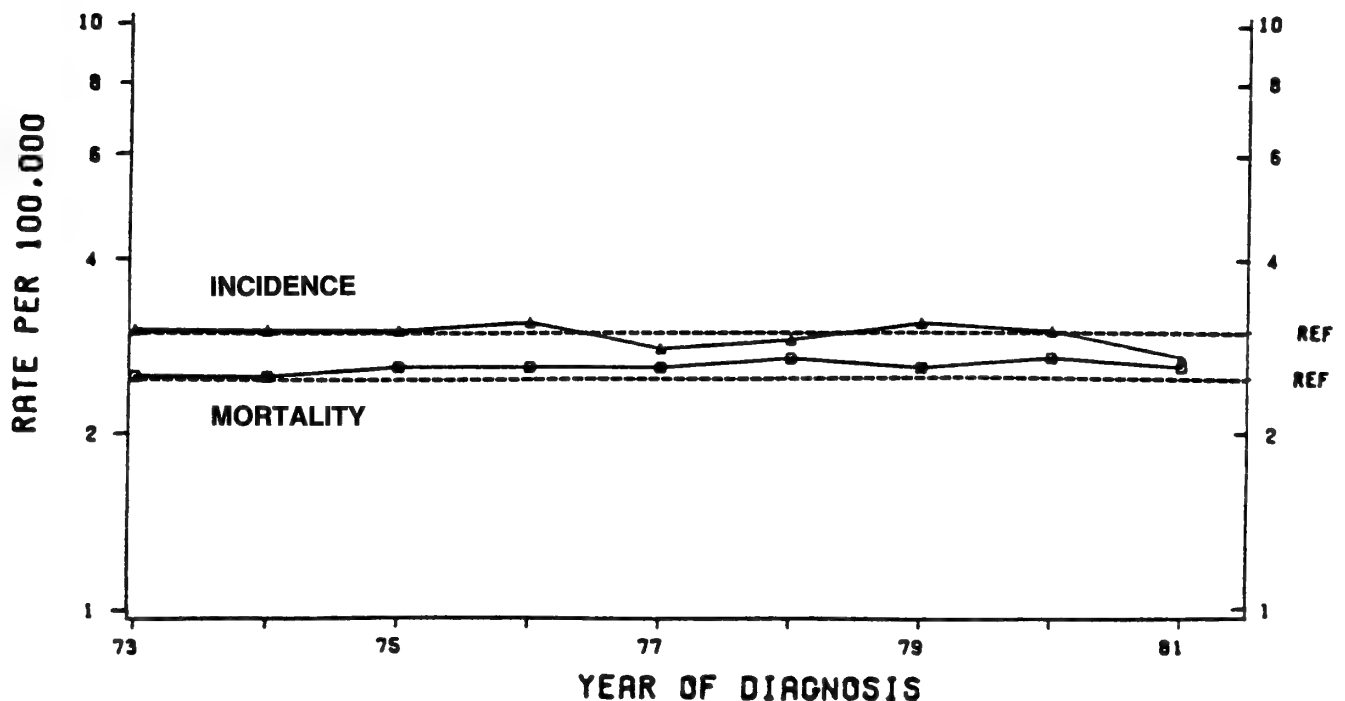
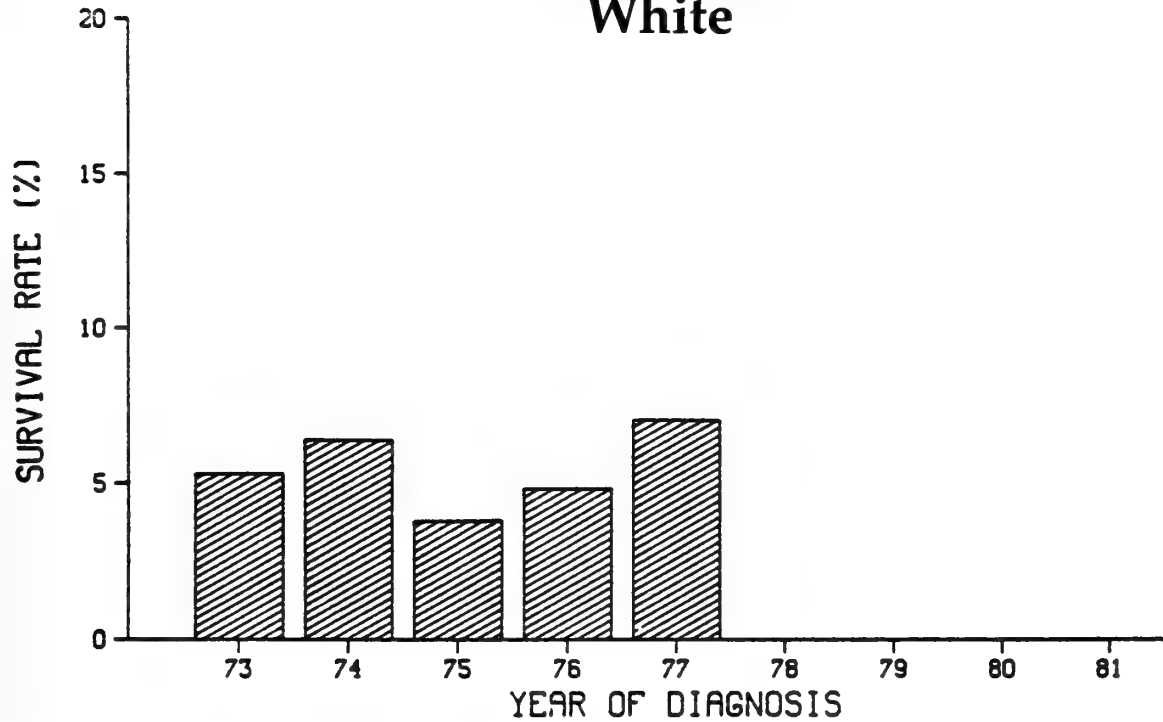


Figure VIII-17

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Larynx Black

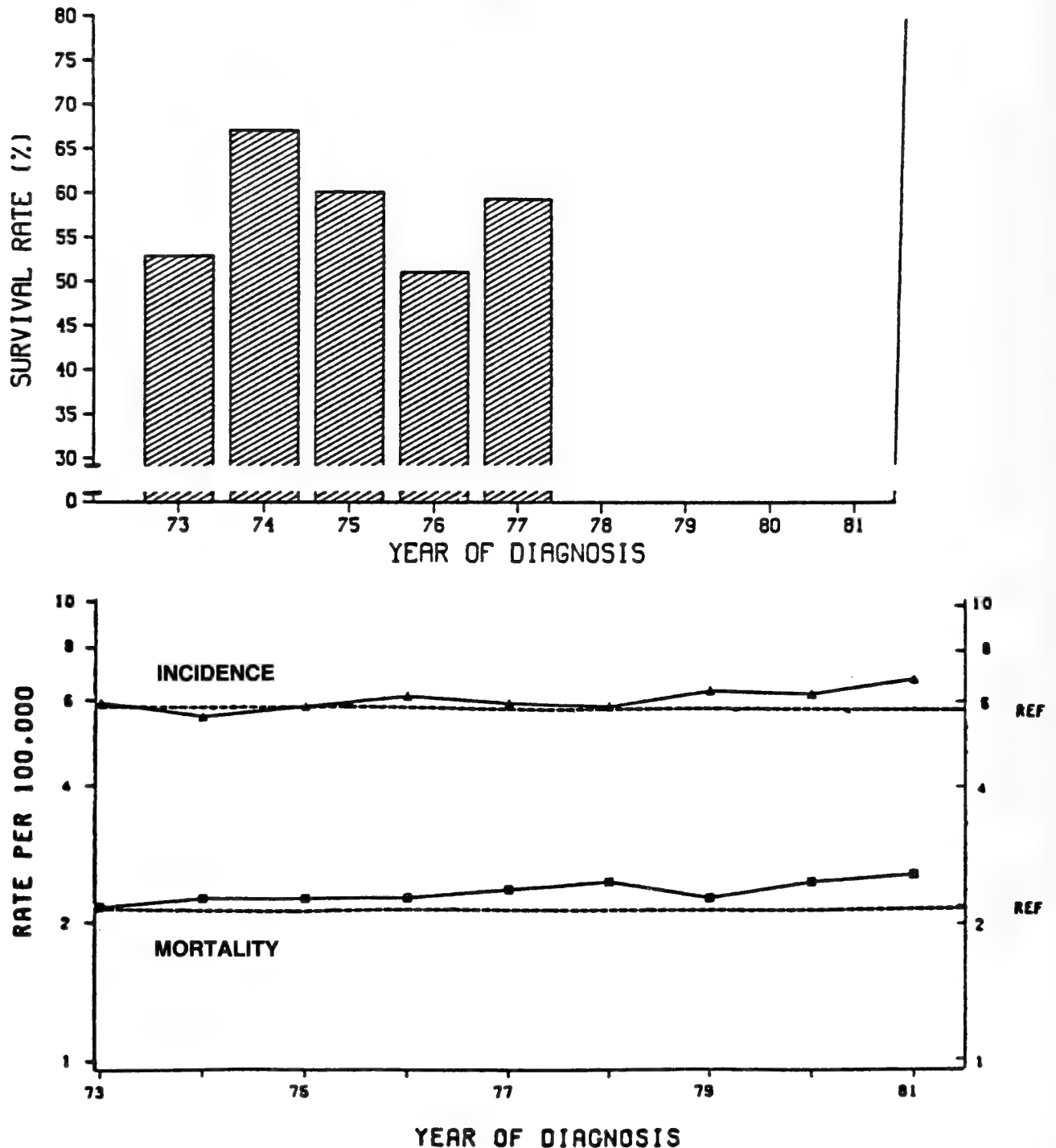


Figure VIII-18

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Larynx White

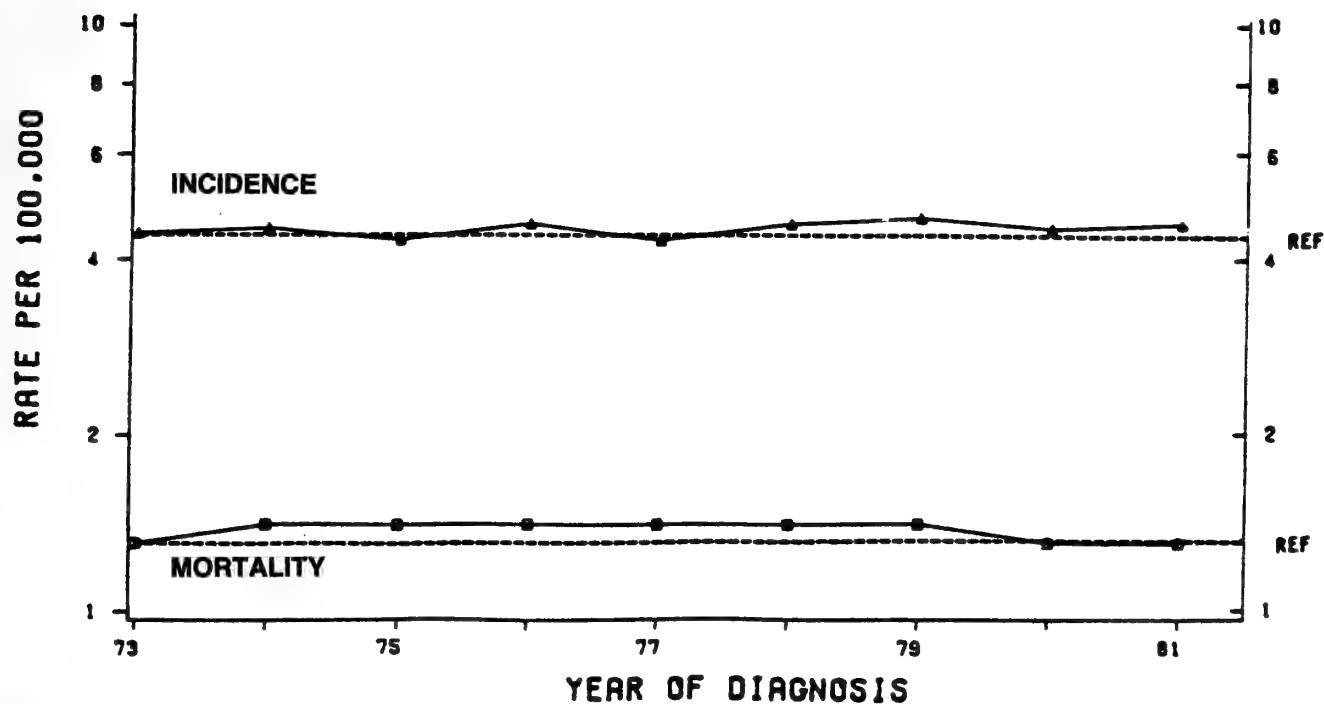
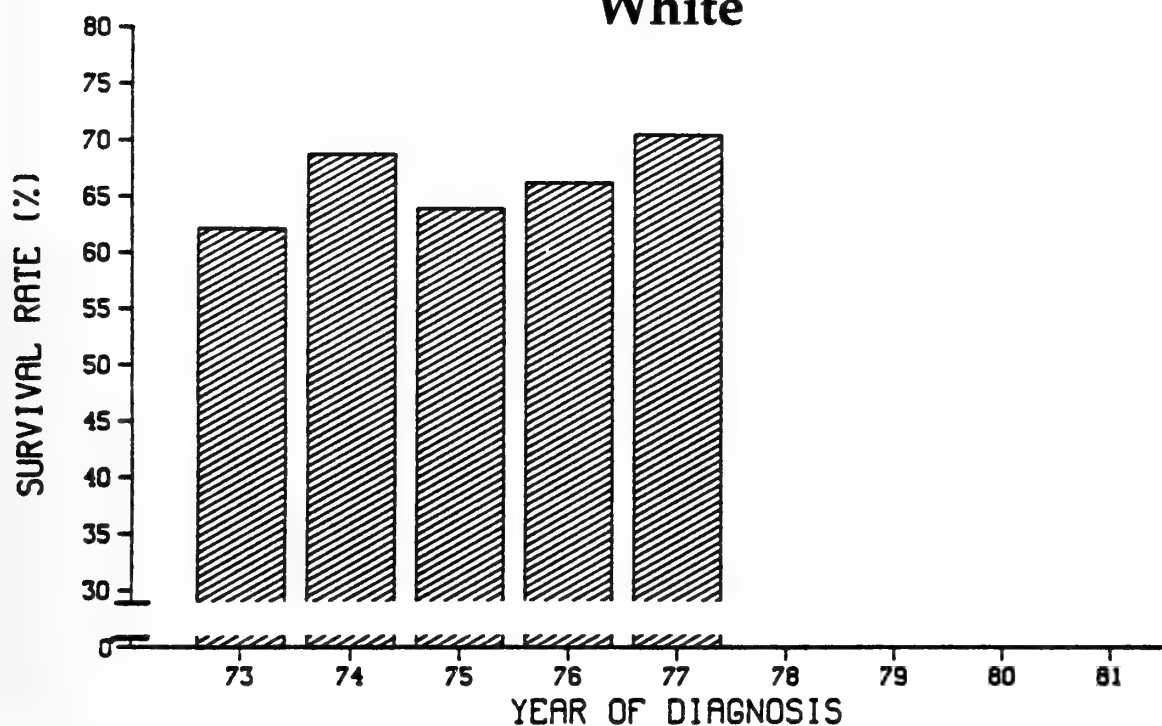


Figure VIII-19

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Lung and Bronchus Black, Male

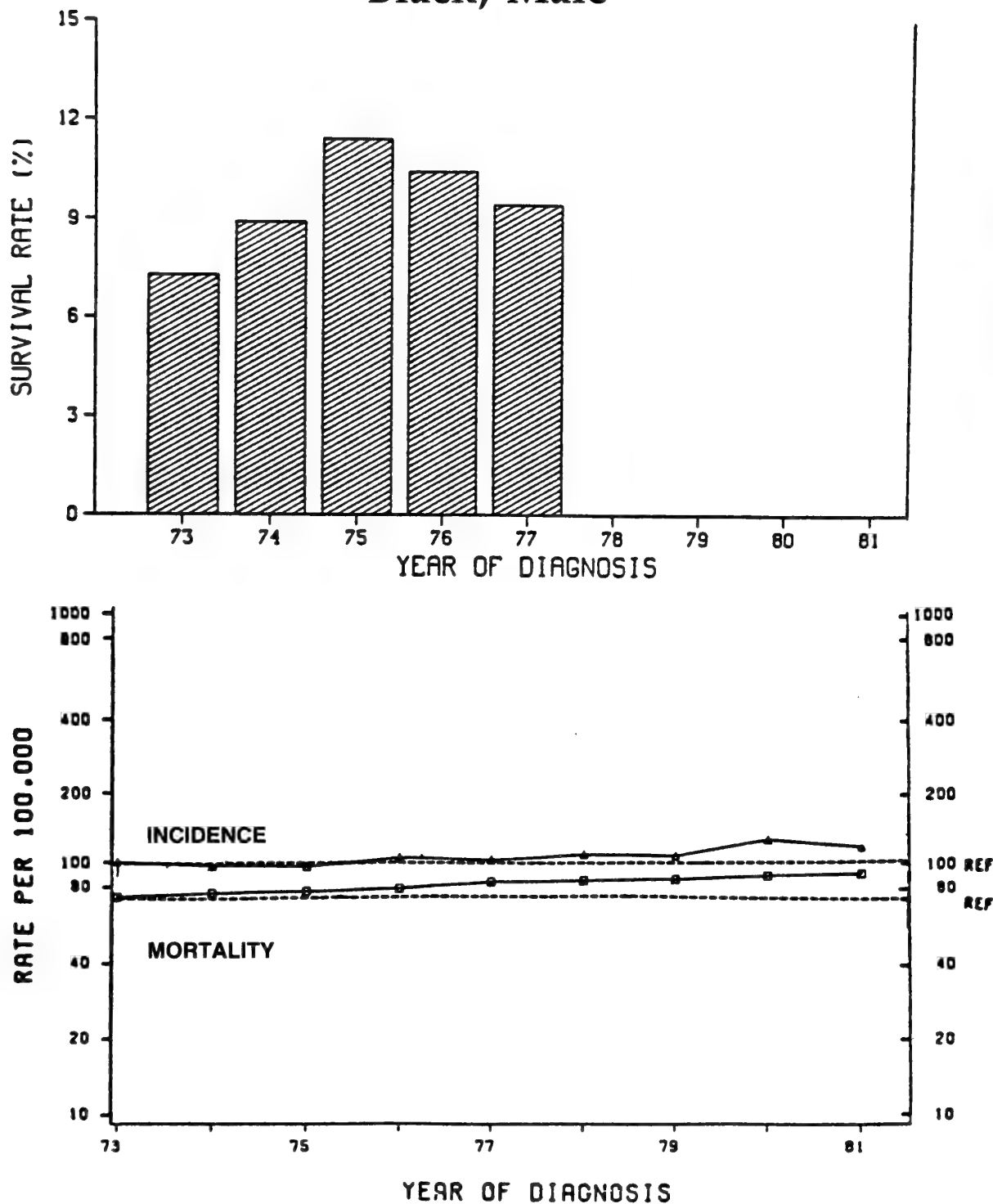


Figure VIII-20

**Five-year Relative Survival Rates and  
Age-adjusted Incidence and Mortality Rates per 100,000  
by Year of Diagnosis: 1973-81**

**Lung and Bronchus  
White, Male**

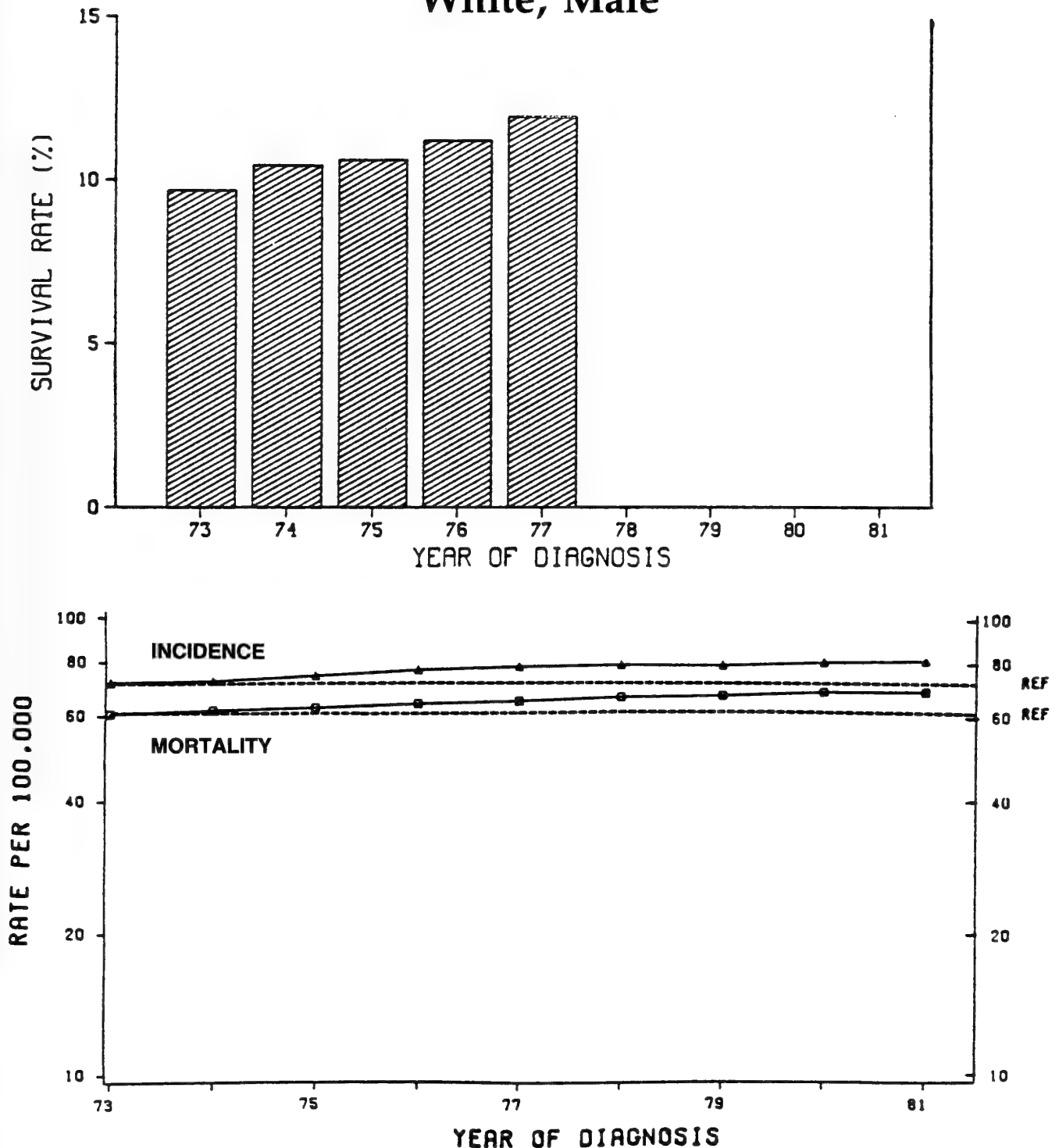


Figure VIII-21

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Lung and Bronchus Black, Female

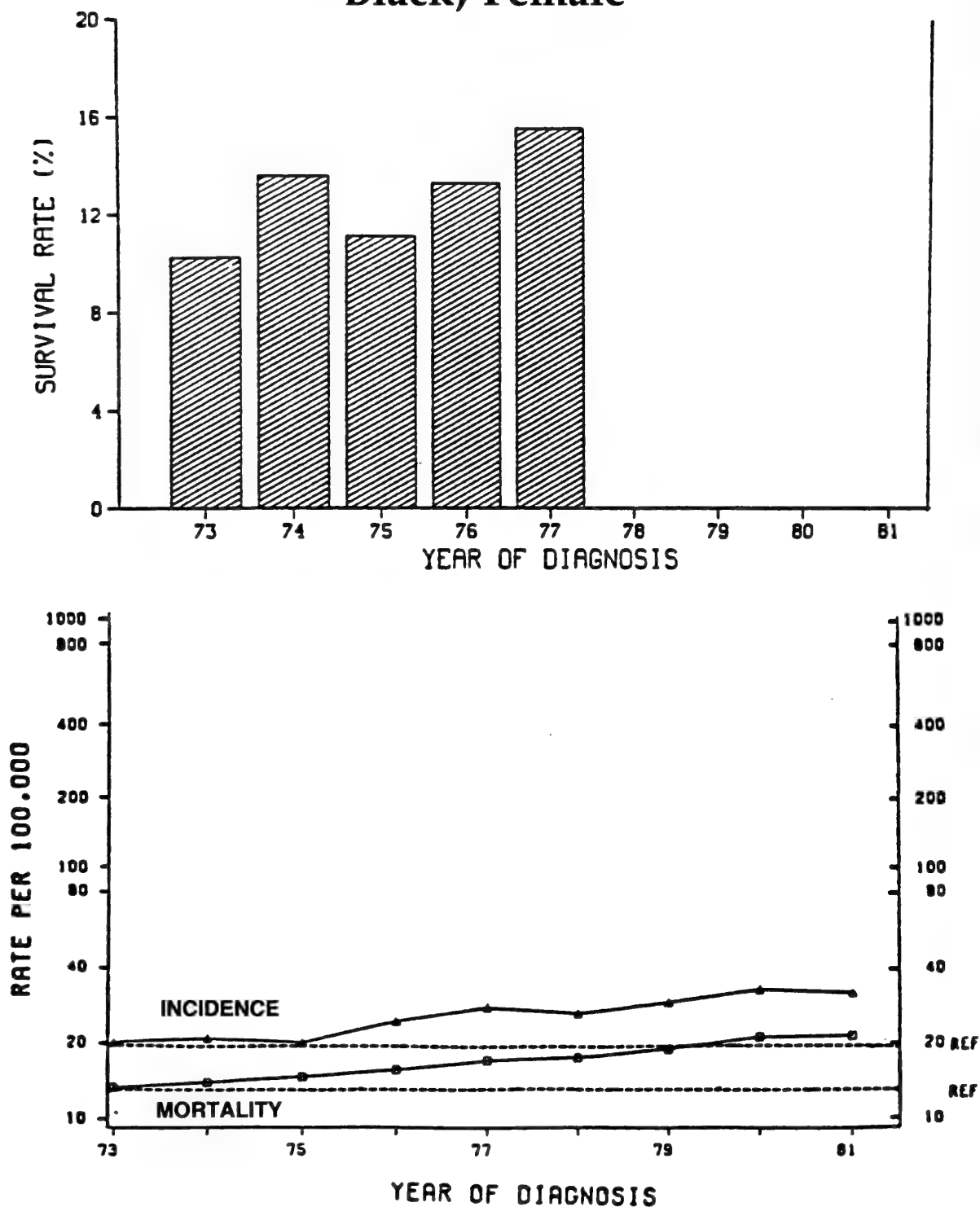




Figure VIII-22

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Lung and Bronchus White, Female

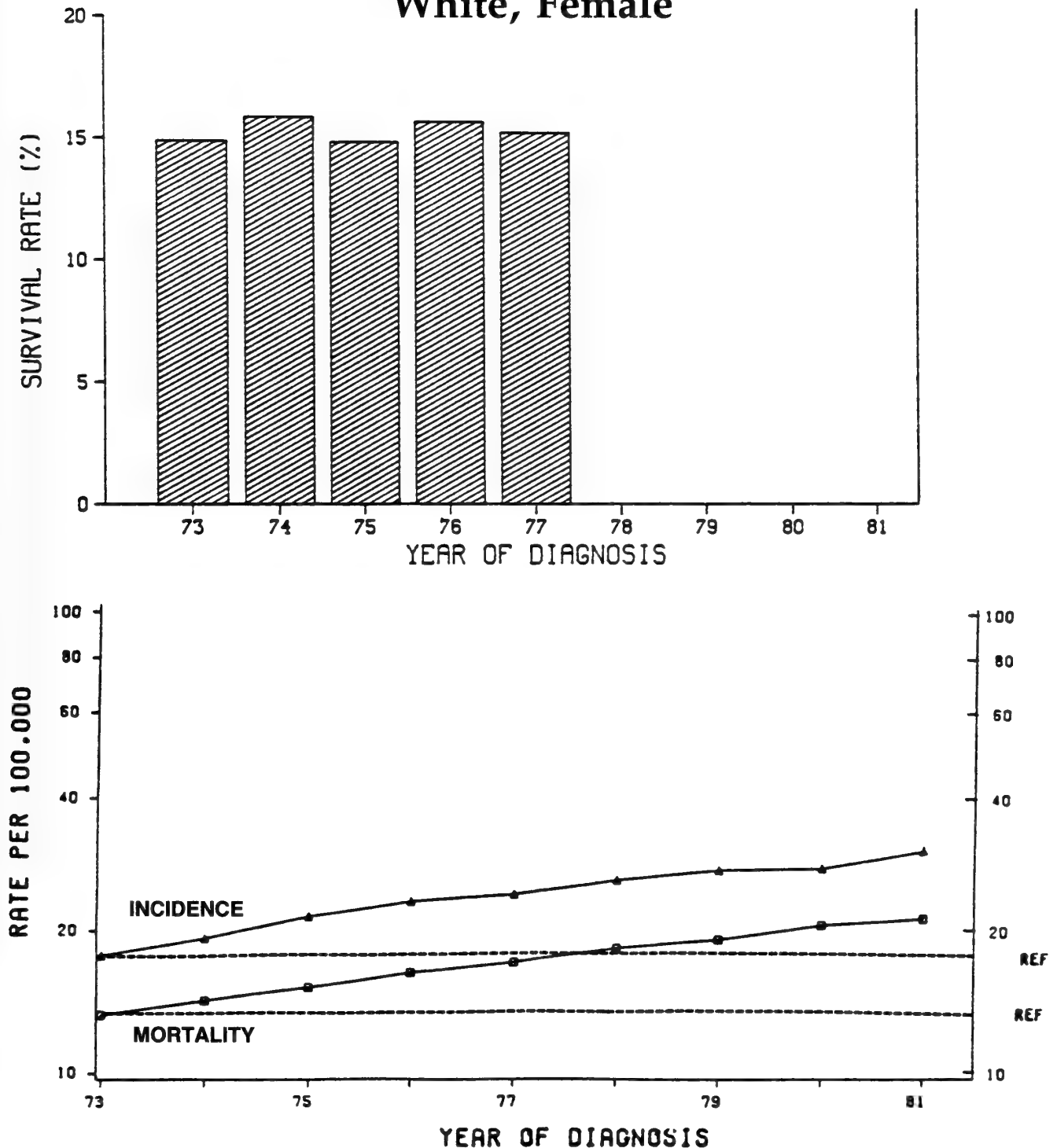


Figure VIII-23

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Multiple Myeloma Black

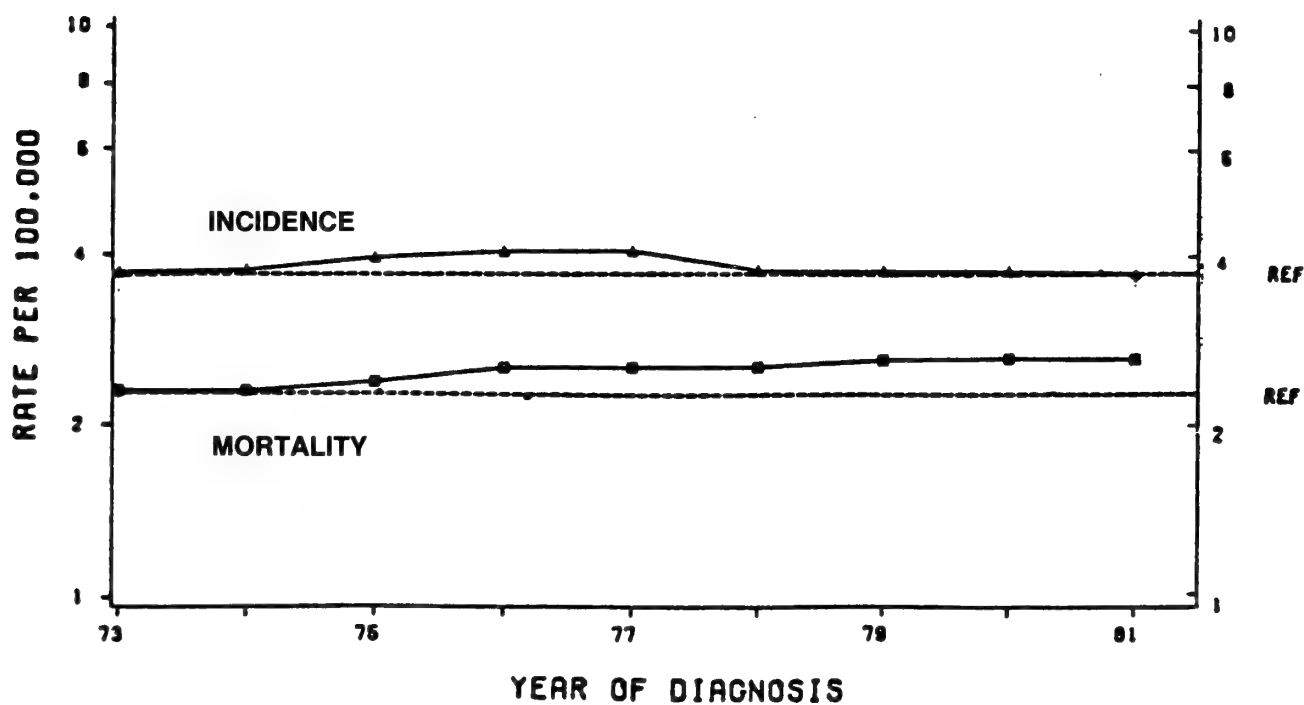
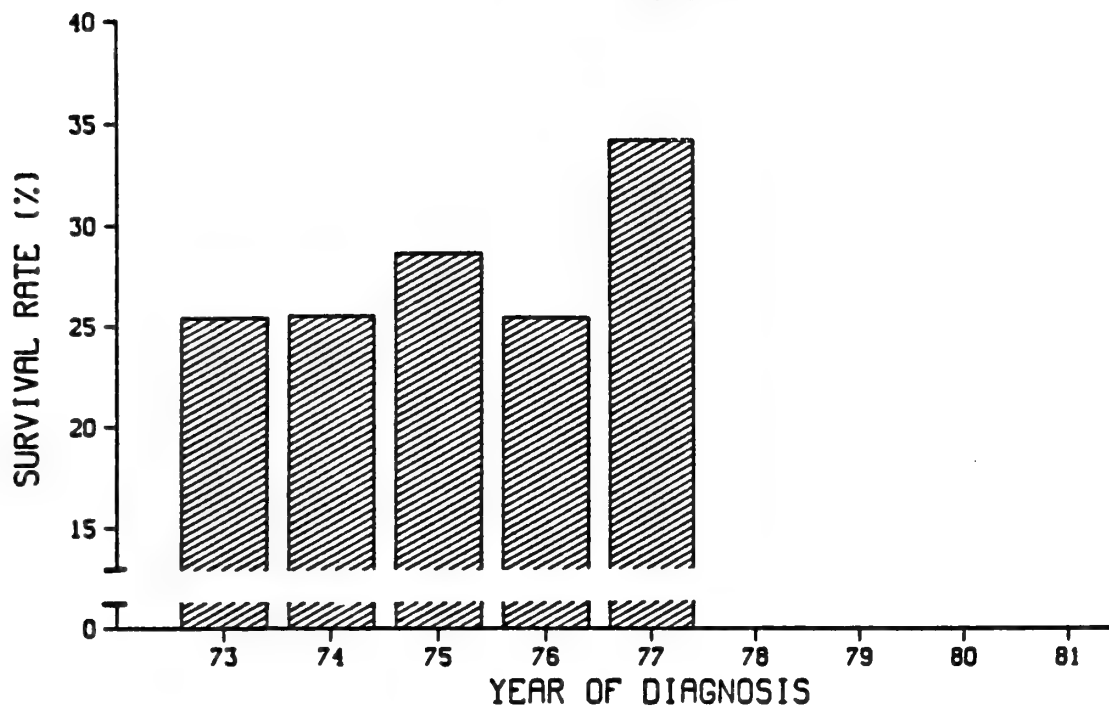


Figure VIII-24

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Multiple Myeloma White

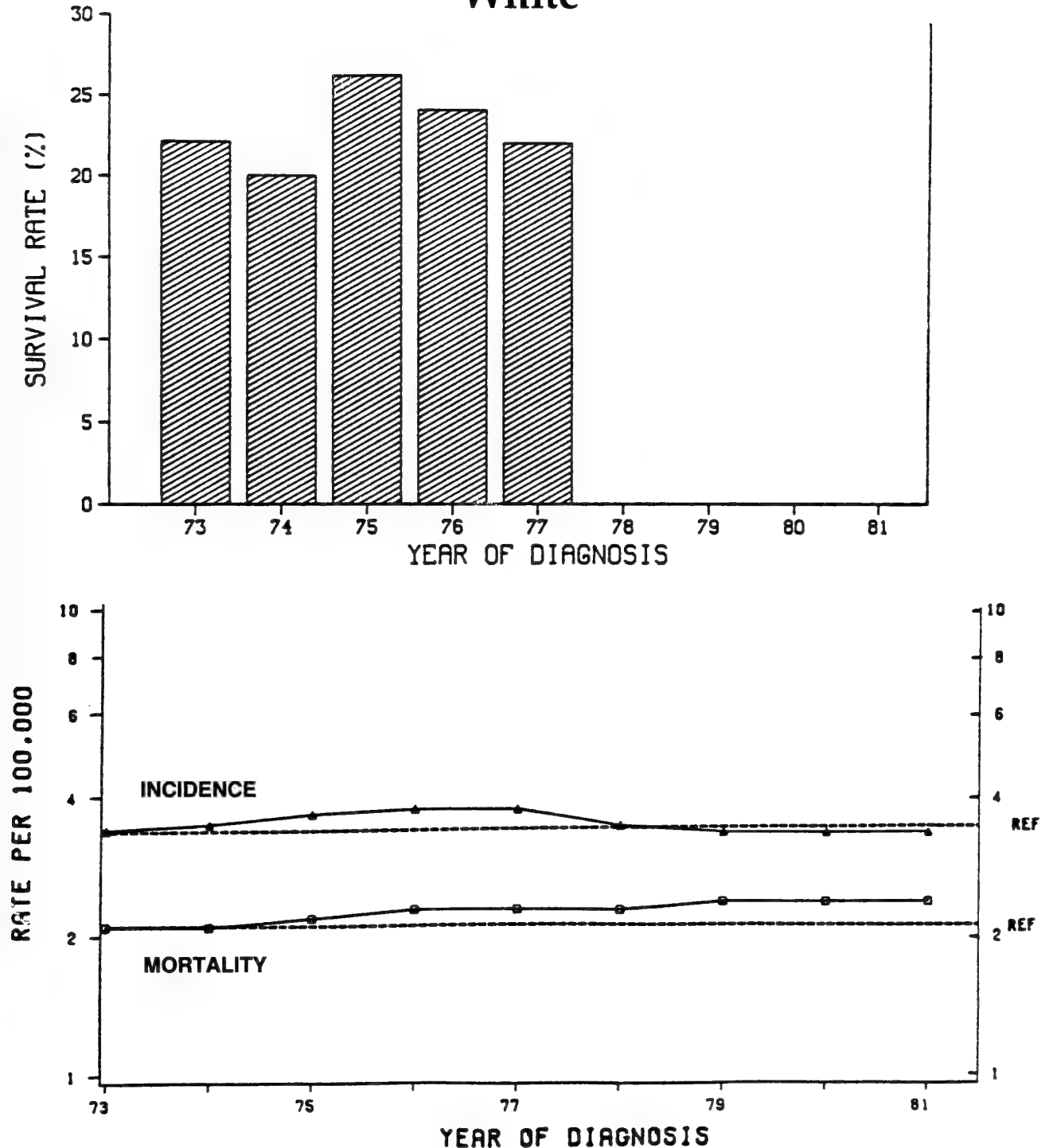


Figure VIII-25

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Ovary Black

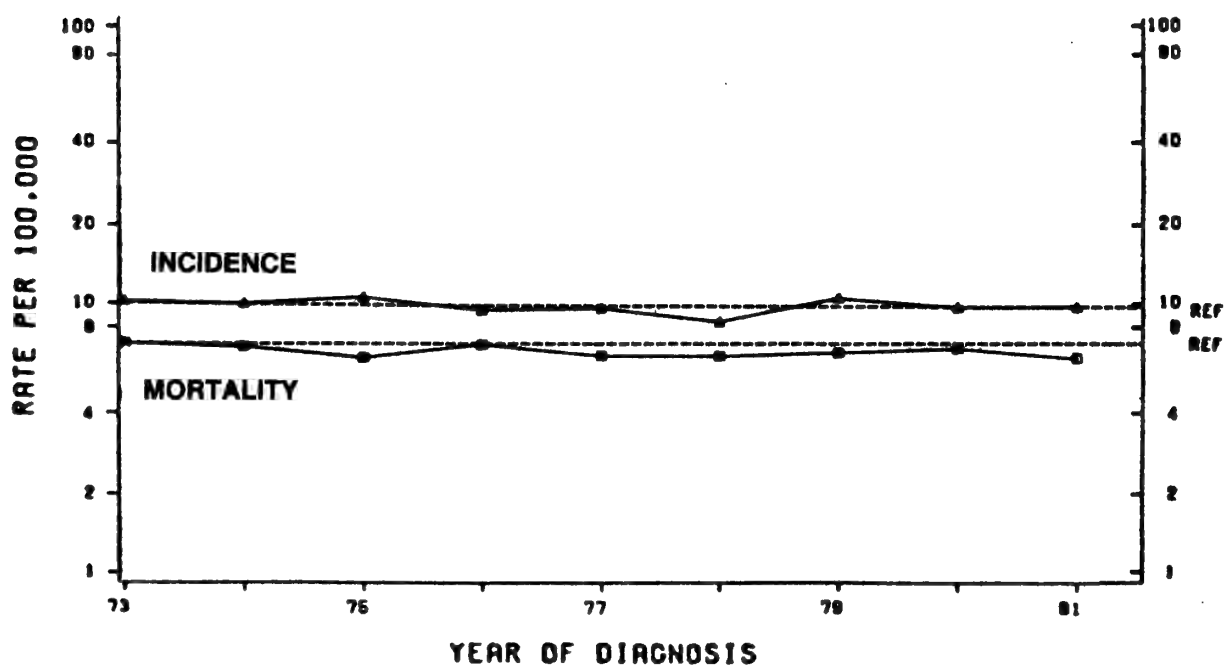
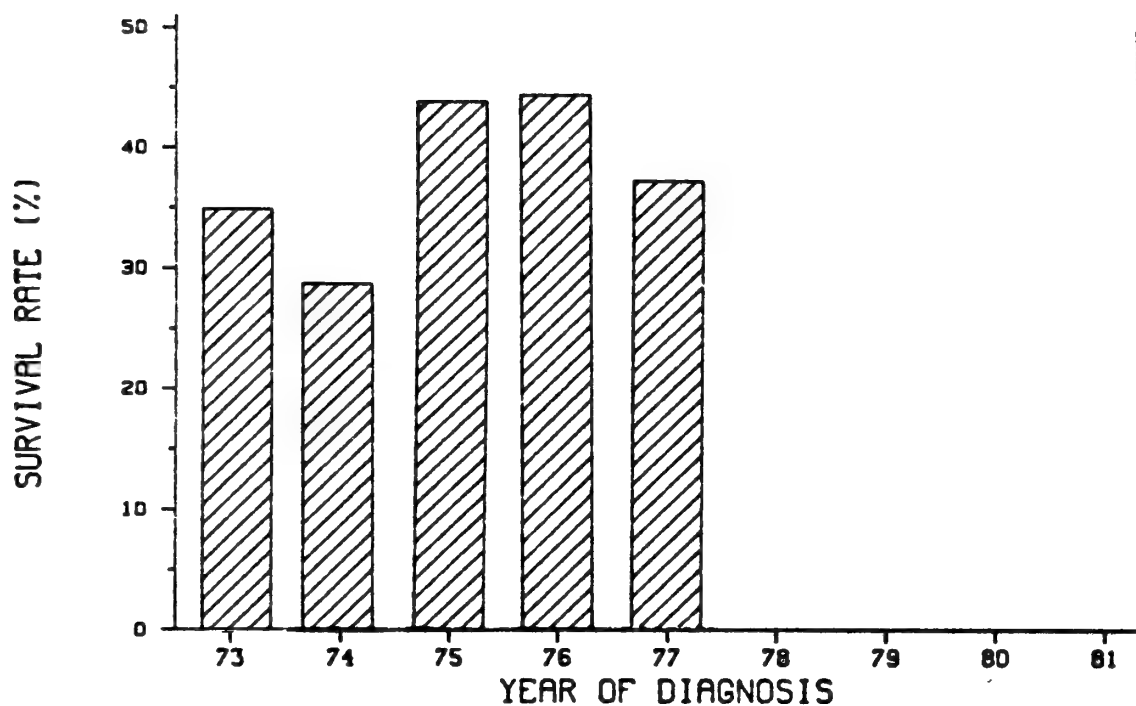


Figure VIII-26

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Ovary White

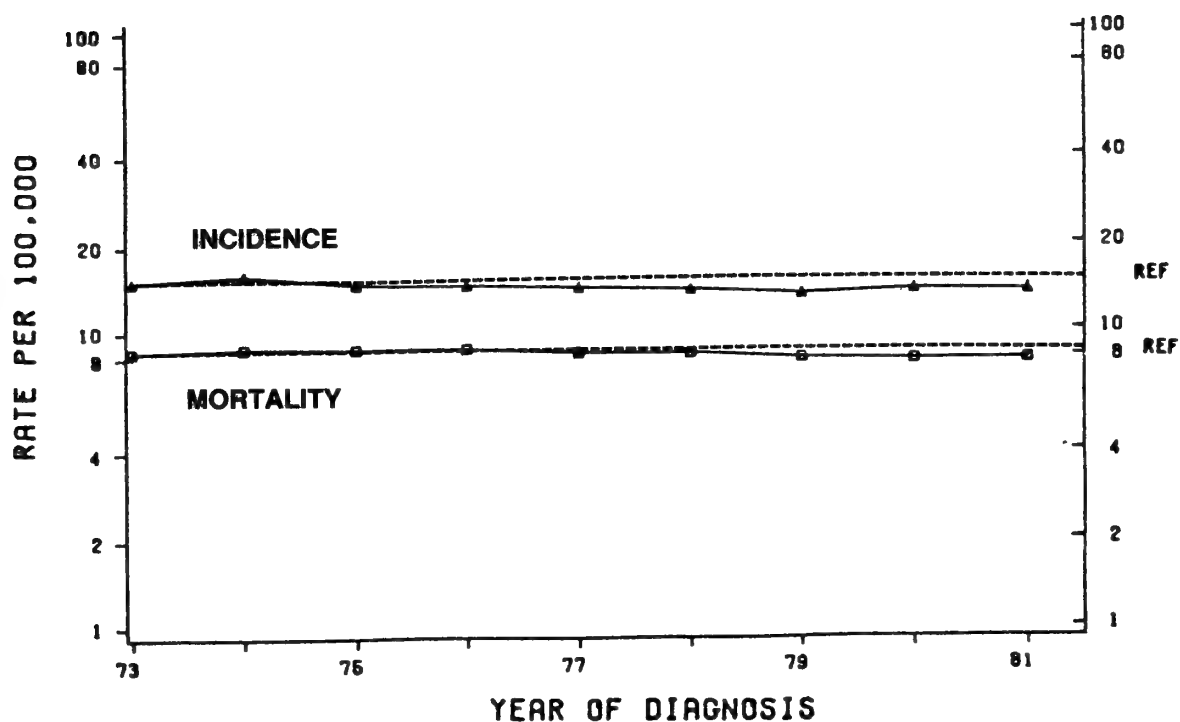
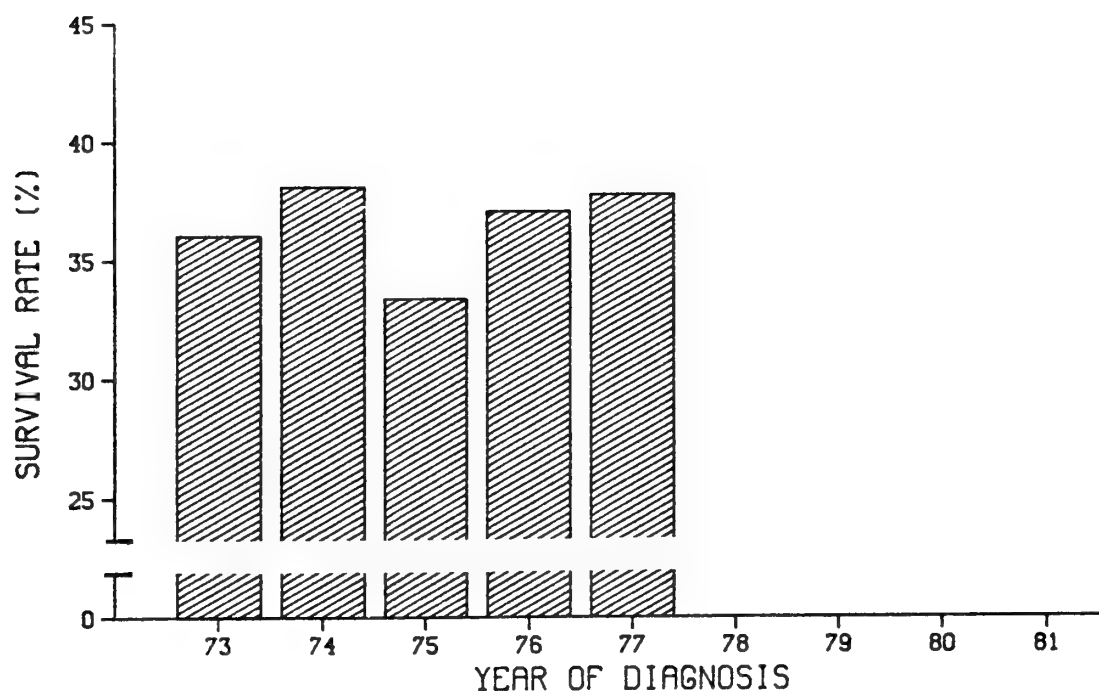


Figure VIII-27

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Pancreas Black

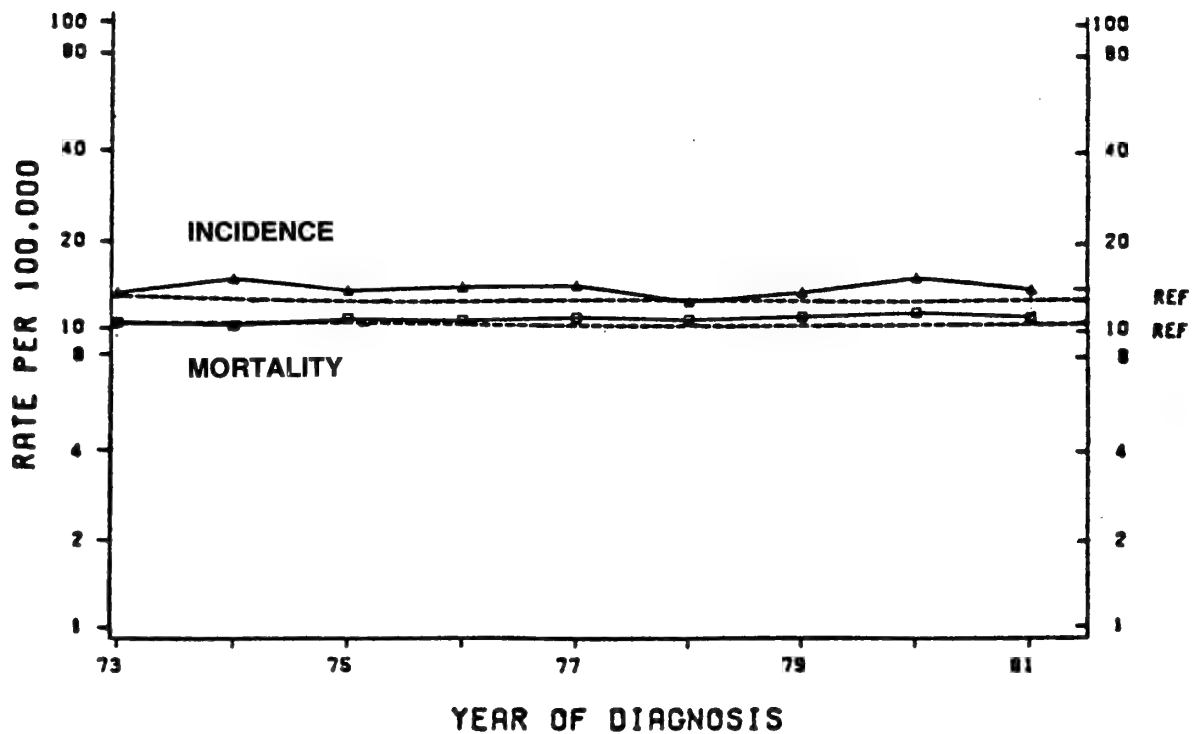
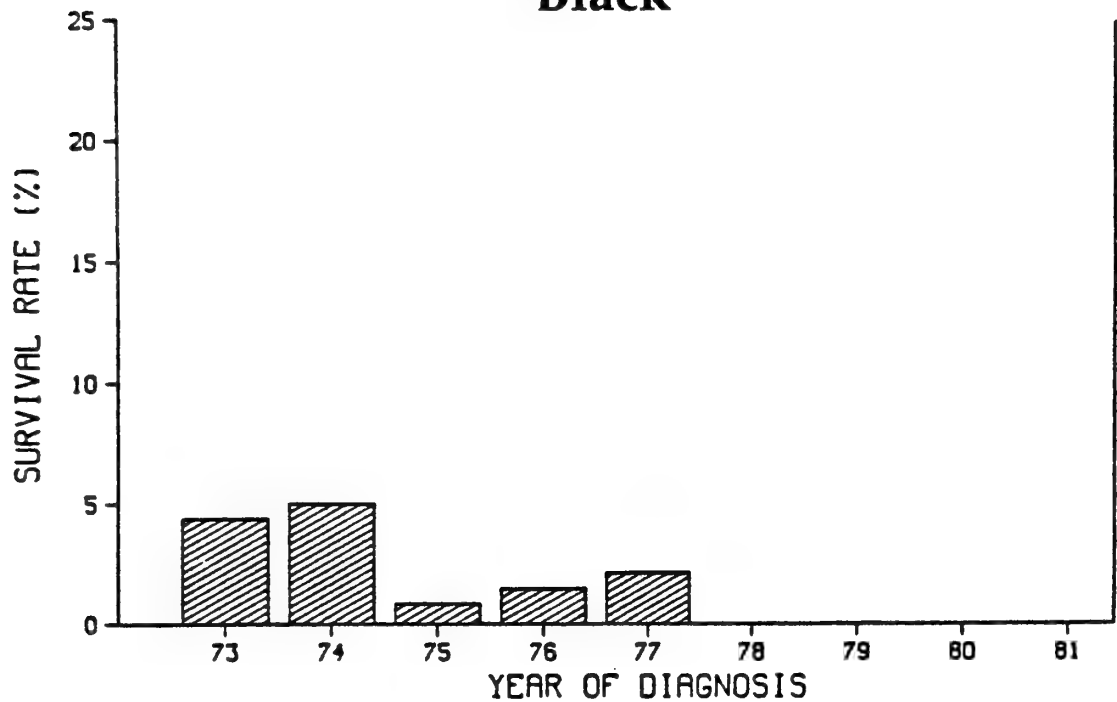


Figure VIII-28

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Pancreas White

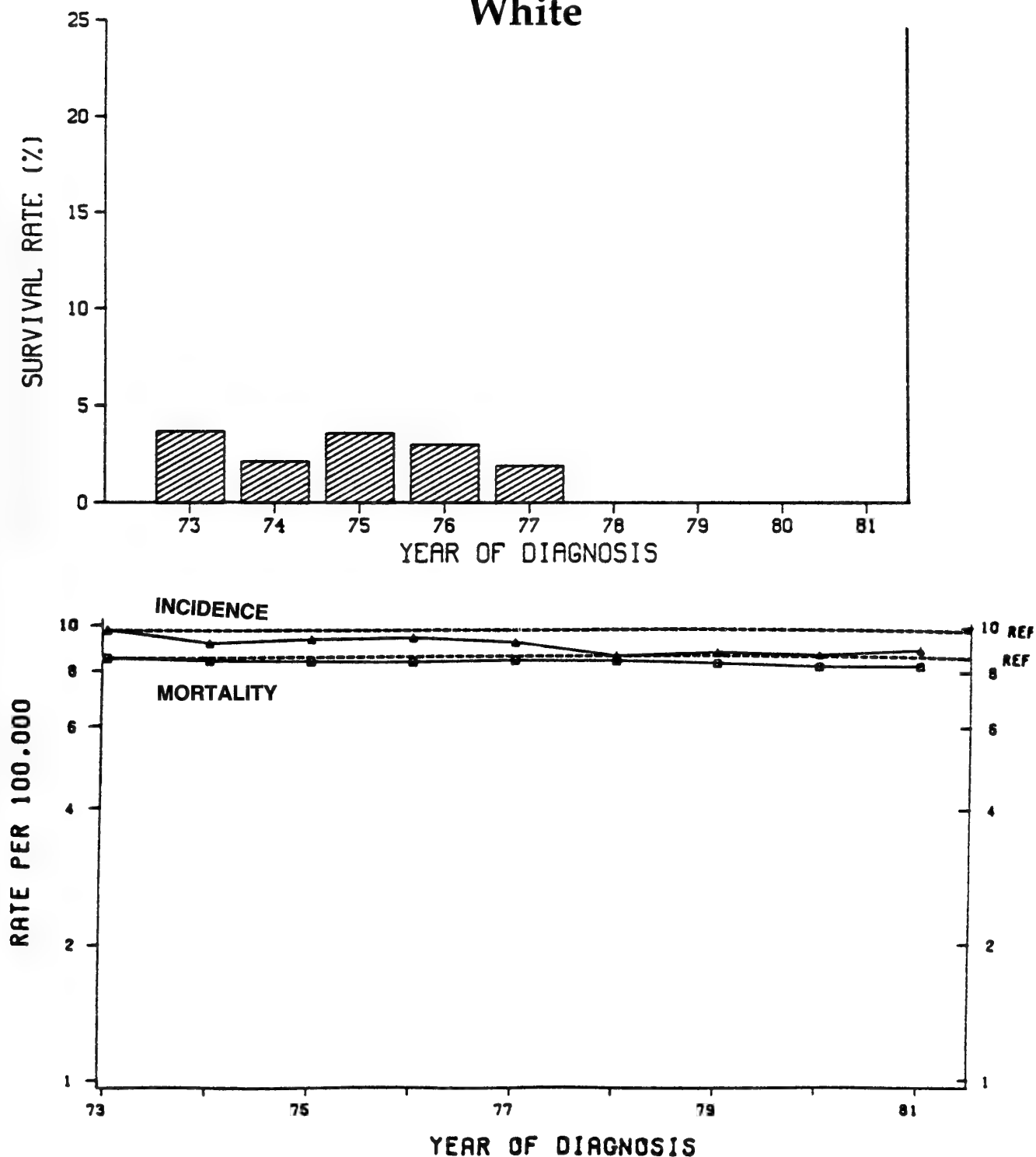


Figure VIII-29

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Prostate Black

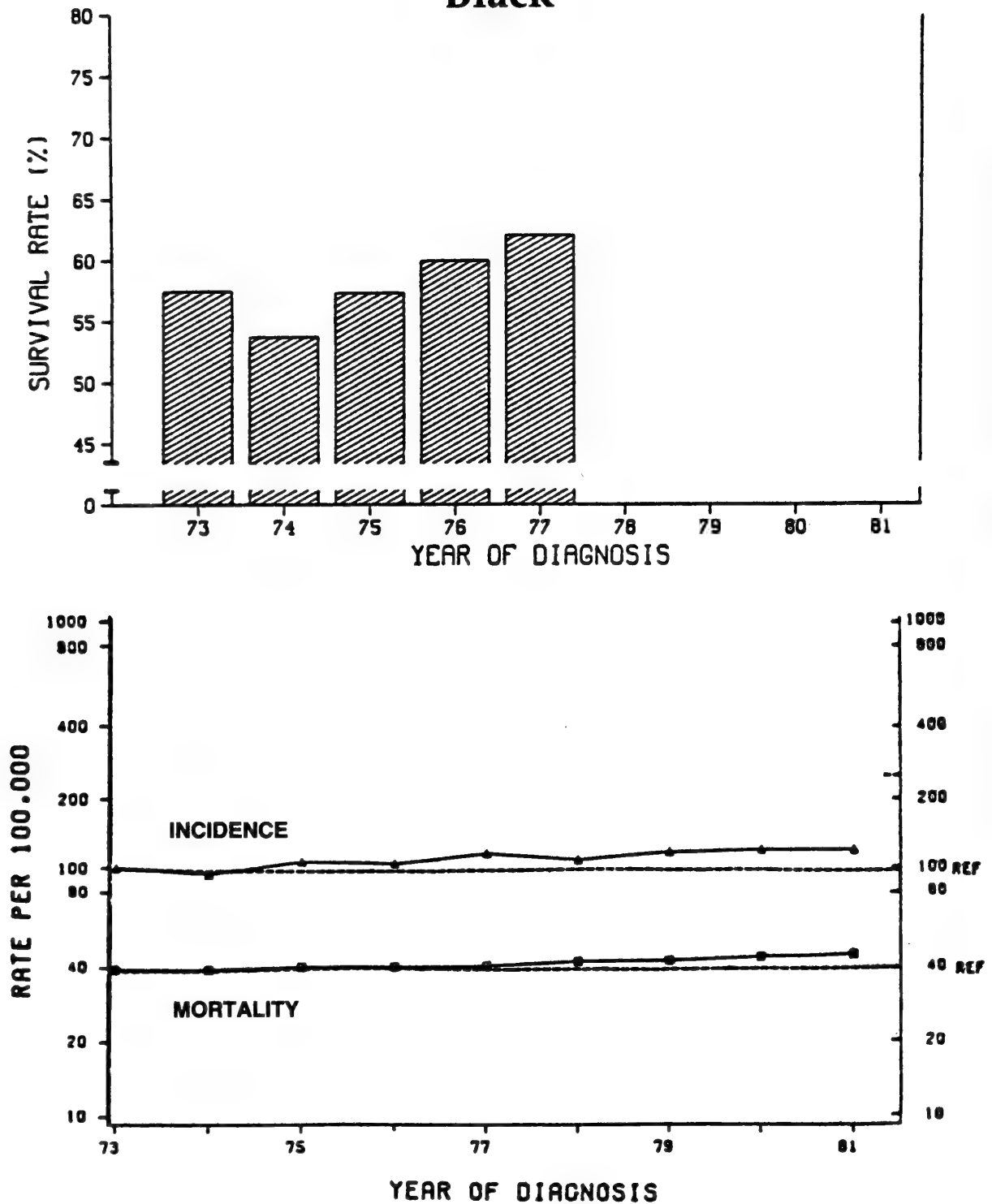




Figure VIII-30

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Prostate White

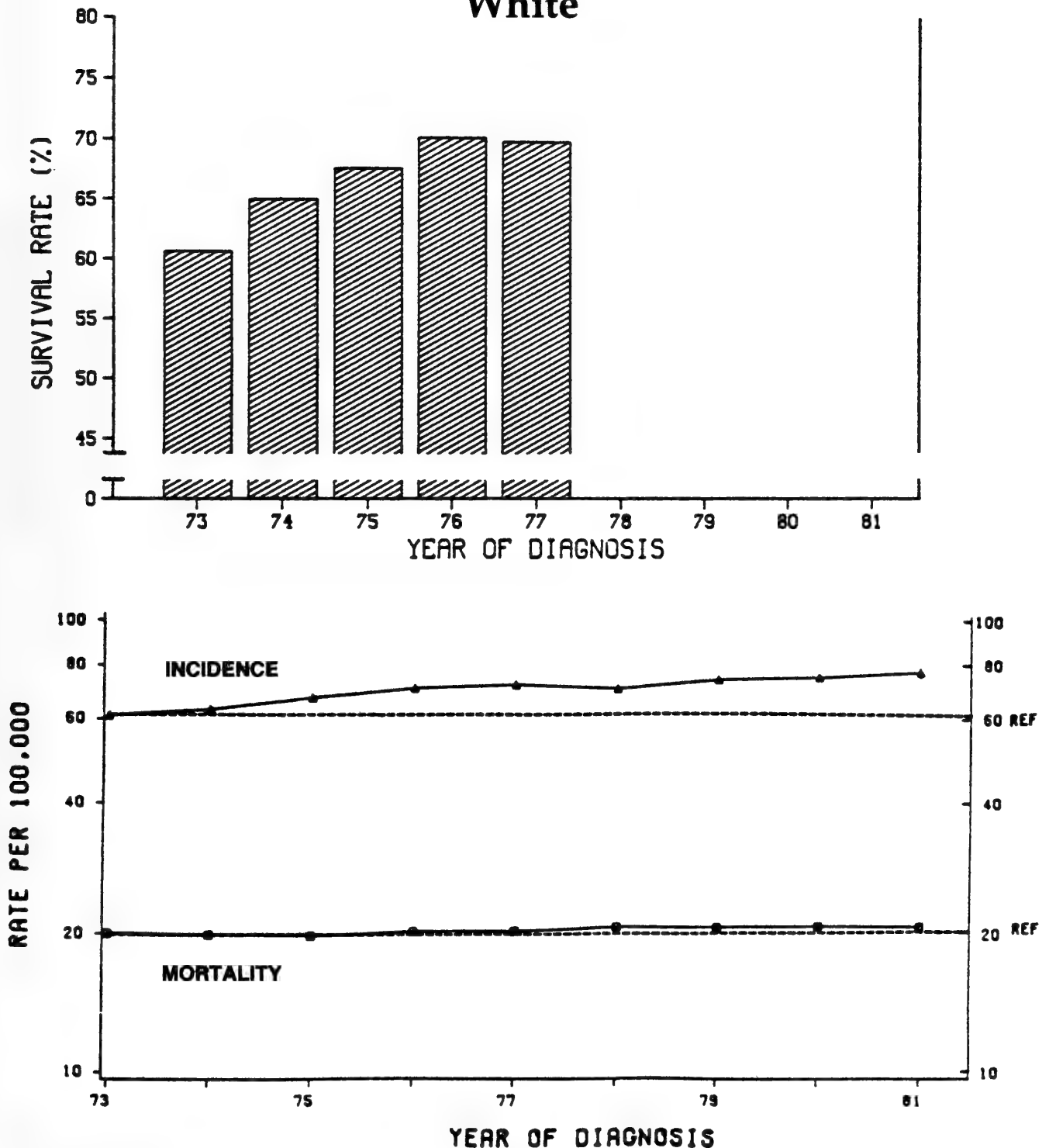


Figure VIII-31

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

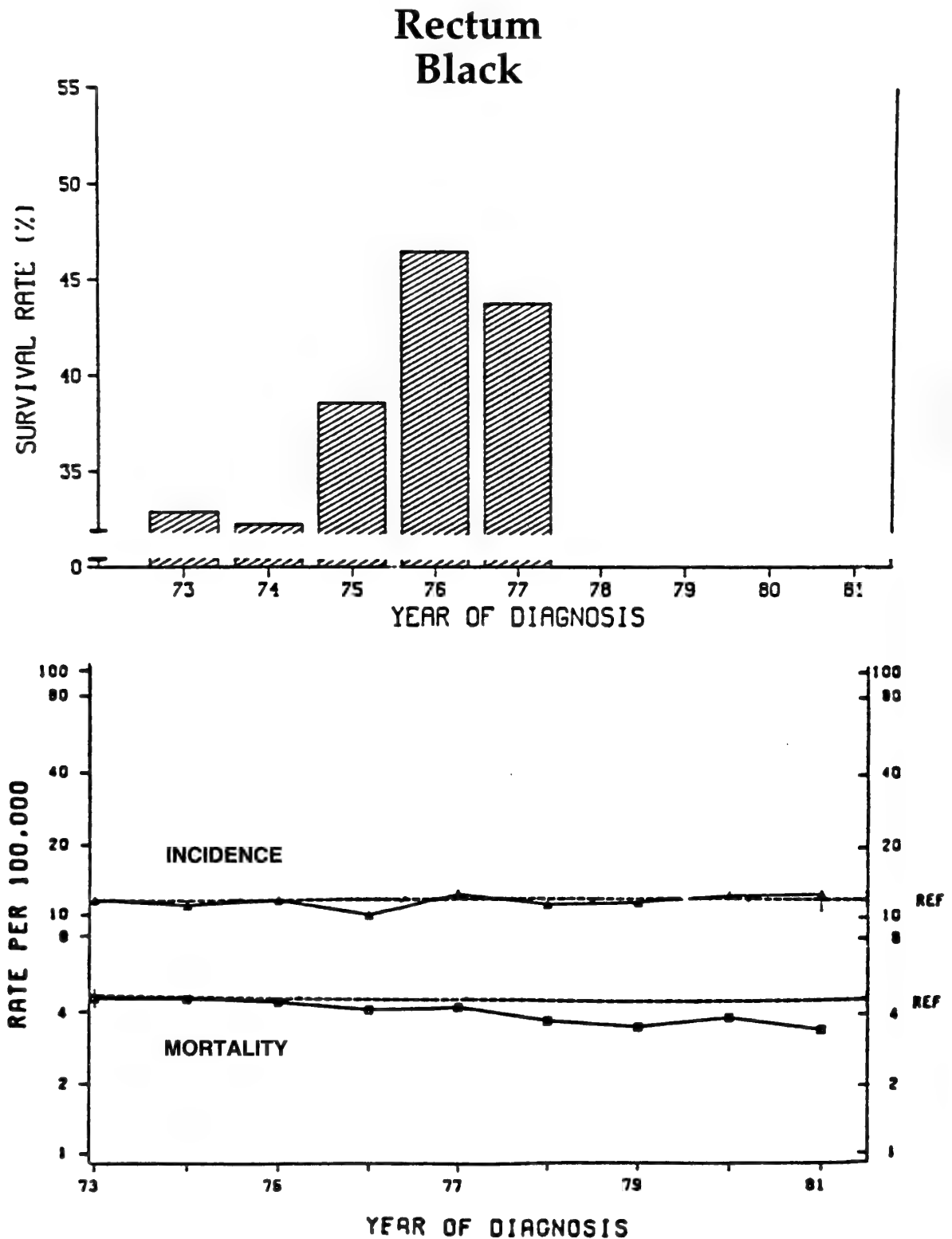


Figure VIII-32

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

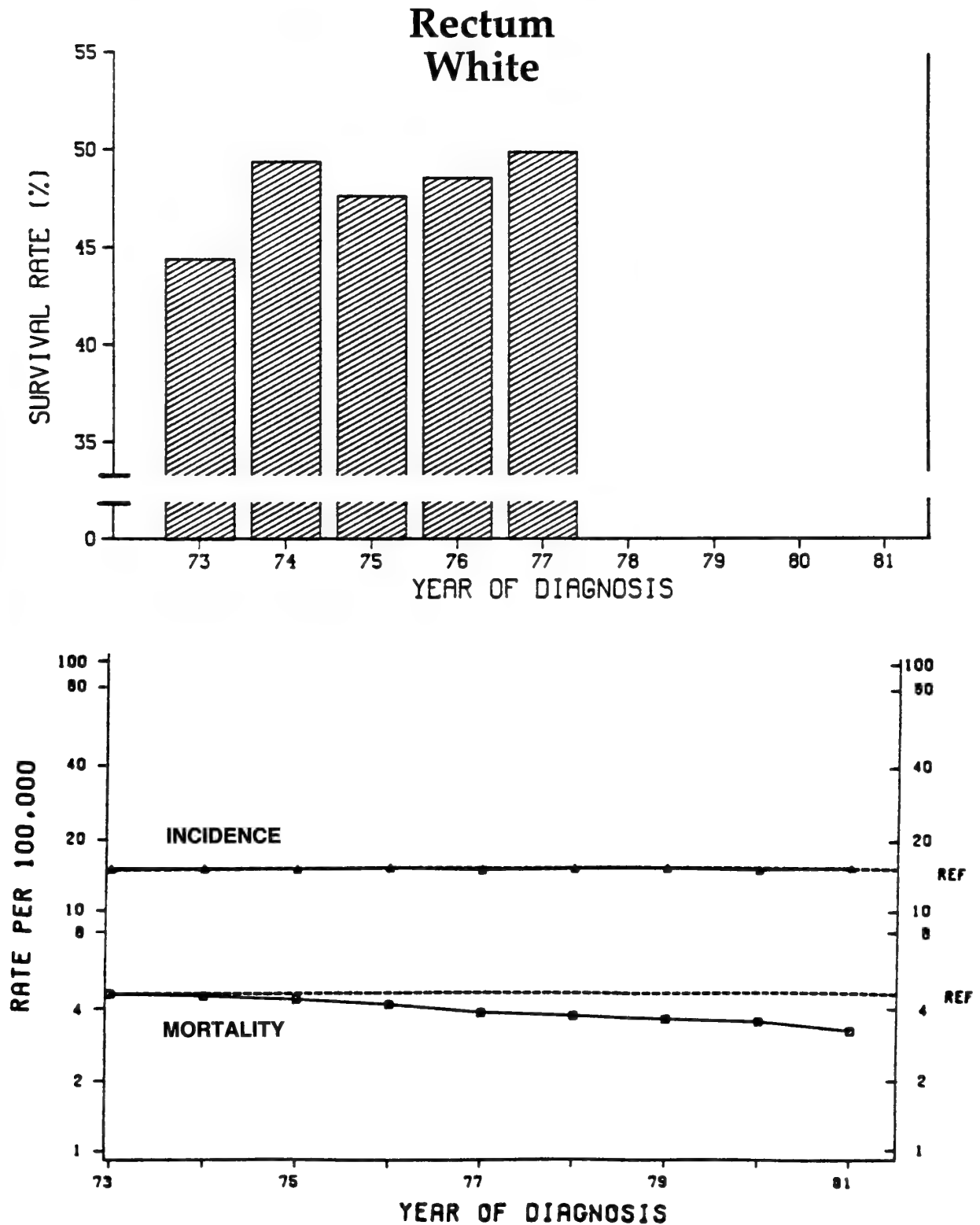


Figure VIII-33

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

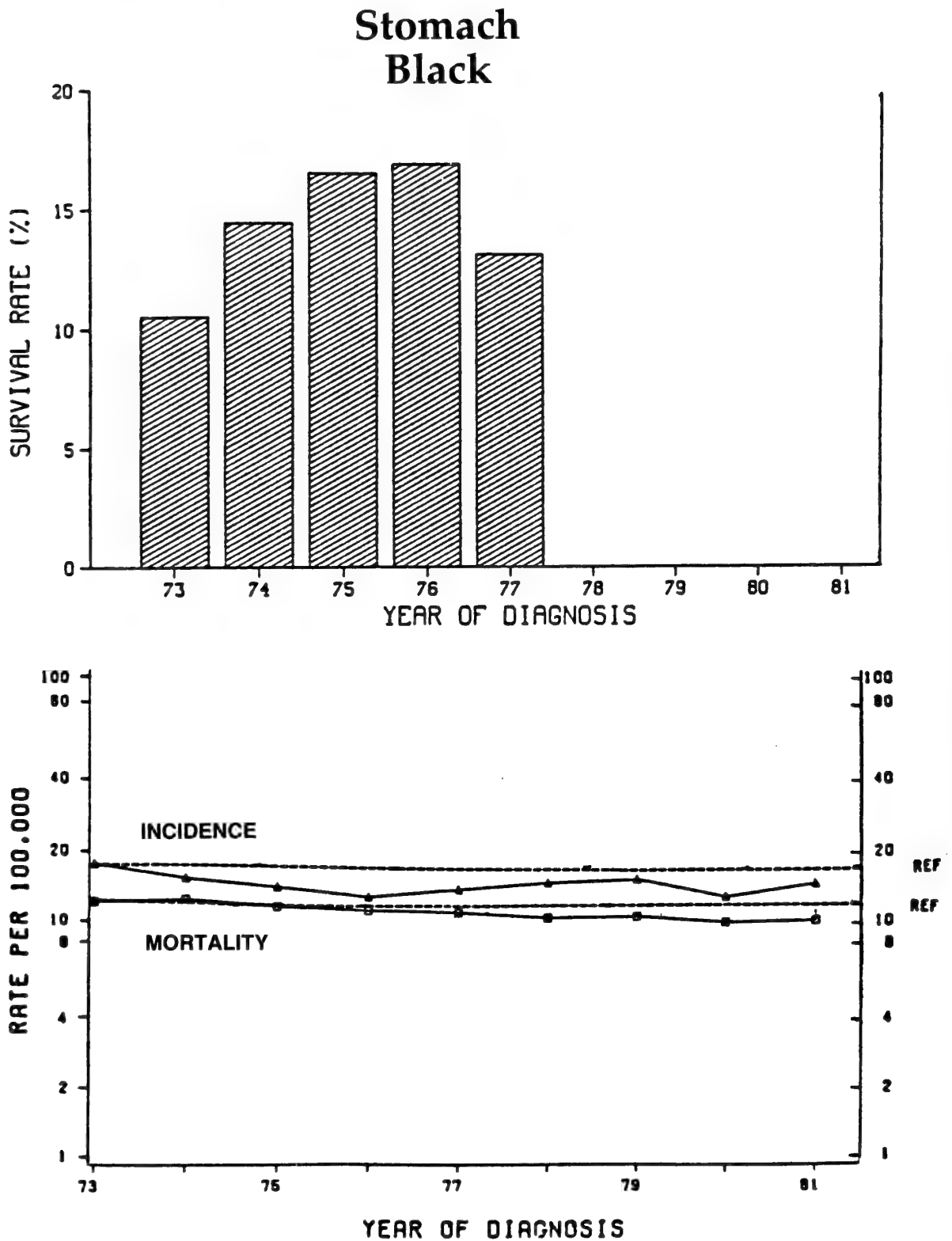
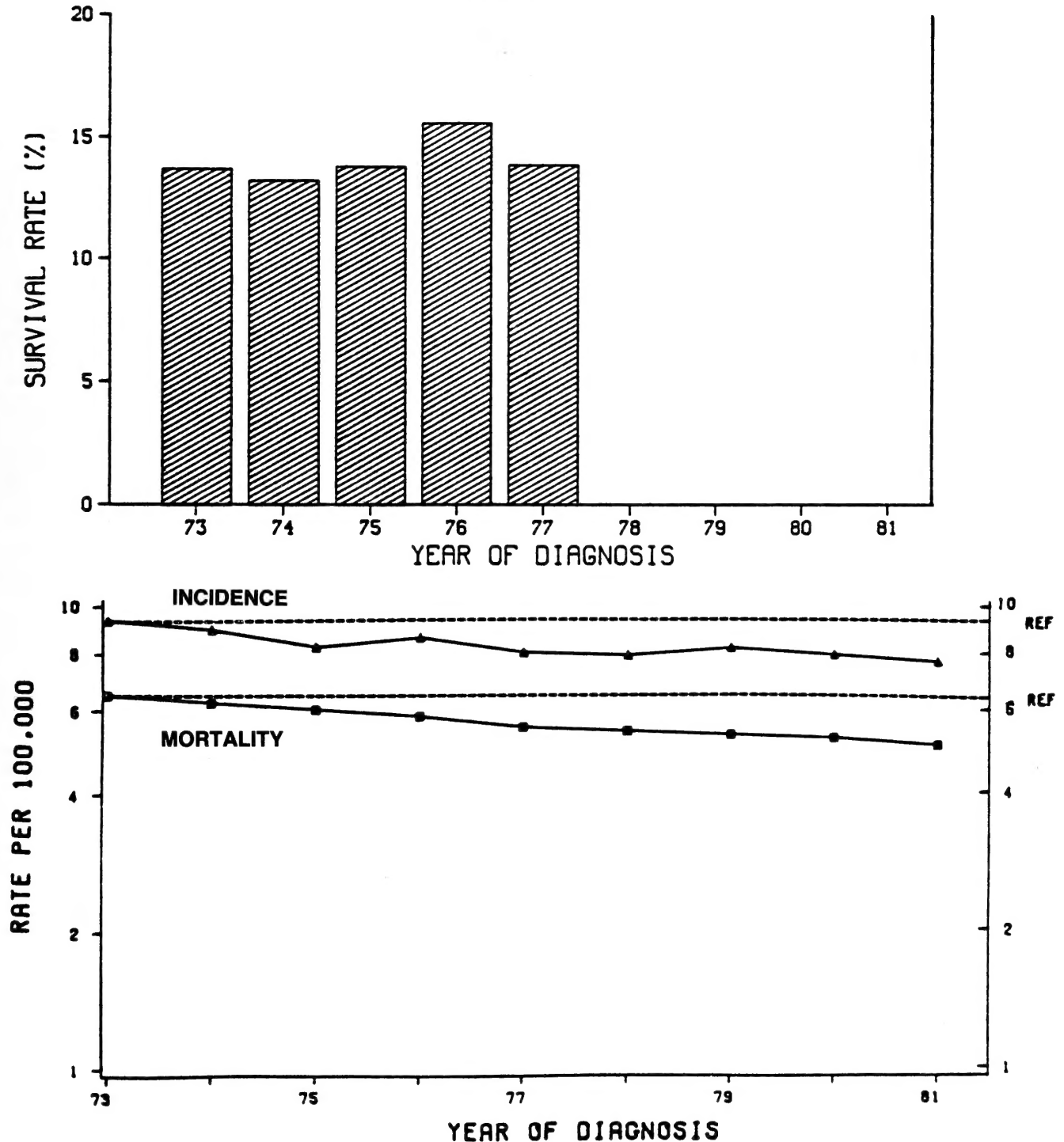


Figure VIII-34

# Five-year Relative Survival Rates and Age-adjusted Incidence and Mortality Rates per 100,000 by Year of Diagnosis: 1973-81

## Stomach White





**OFFICE OF MINORITY HEALTH  
RESOURCE CENTER  
P.O. BOX 37337  
WASHINGTON, D.C. 20013-7337**



National Cancer Institute  
NIH Publication No. 86-2785  
March 1986